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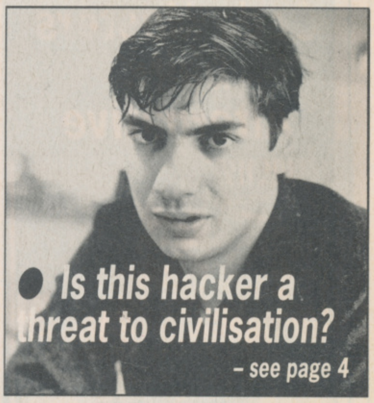
Issue 3 • Nov 26,1988

NEW COMPUTER EXPRESS

First news, first reviews – every week



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The amazing inside story of Amstrad

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EXCLUSIVE

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Code Masters baits Alternative

• Darling: Henceforth we sue

Company lawyers were licking their lips last week as yet another round of squabbling broke out in the budget games world.

Experienced litigants Code Masters wants rival company Alternative to withdraw all copies of its latest title *Formula One Grand Prix* immediately. Code Masters says the game takes advantage of its own title *Grand Prix Simulator* because the game's packaging artwork is too similar – and it has threatened legal action if Alternative doesn't comply promptly.

This isn't the first time these two companies have clashed. Earlier in the year Code Masters was obliged to print an apology in the trade press after running an ad poking fun at Alternative.

David Darling, Code masters' 21 year old managing director accused Alternative of "theft of intellectual property". He added grandly: "Henceforth we reserve the right to act, without notice, with the full force of the law, against anyone who imitates our products."

Alternative's boss Roger Hulley branded the Coders as "silly". "It's all a joke," he told *Express*. "This is just a case of publicity seeking." He pledged that he would be fighting any action.

"It would have been better if they had at least called us with their complaint. As it is I heard this from the press. But we've never been ranters and ravers like Code Masters."

Code Masters claims that the picture of a Ferrari on the pack of Alternative's game is a direct copy of its own packaging. On both games the car is numbered 27. Code Masters is privately dismissive of the Alternative game and thus fears that gamers will mistake it for its own title.

Comdex launch for the Amiga with PC power

2000 AT: COMMODORE'S DOUBLE-EDGED BLITZ

An Amiga 2000 which can be switched to PC-AT mode is soon to be unleashed in Britain. And established Amiga owners will be able to upgrade their own machines.

The new model will offer users the best of both worlds: Amiga graphics power *and* the ability to run the huge range of PC business software with all the power of a PC AT.

Commodore's top brass in the UK are keeping tightlipped about the developments but it is known that this machine will be spearheading the company's range in 1989. A fully fledged launch at the *Which Computer?* Show early next year is thought most likely.

Commodore is believed to be aiming for an "ideal" entry level price of £1,500 although the machine may cost more than that initially. As yet no prices are available for the AT upgrade to existing Amiga 2000s which will be supplied as a slot-in bridgeboard.

Both the full machine and the bridgeboard were unveiled at last week's huge Comdex show in Las Vegas to a reportedly good reception.

Sources suggest that Commodore is planning a staggering ad spend of £1 million for the first few months of next year on the 2000AT alone. The firm's feeling is that PC owners want the A2000's graphics capabilities but are reluctant to buy an Amiga because that would render their software useless.

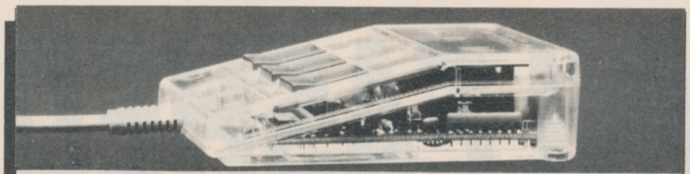
• Amiga 2000: AT compatibilty next year

"We want to protect the investment people have already made in MS-DOS software," said Commodore's Dean Barrett. Last summer Commodore flagged an Amiga with a less powerful PC-XT bridgeboard. That has rarely been seen and was given only limited publicity.

Commodore knows that the 2000AT's price must be kept down. Feeling in the trade is that such a micro – priced in the £1,500 area – will do well.

The A2000 has proved to be a success in graphics environments. Commodore's hope is that now the general business fraternity will take it on. At the moment the machine costs £1,300 for CPU and keyboard and £1,500 with a colour monitor.

Although it has not been confirmed, the likelihood is that a 5.25" disk drive will be part of the 2000AT.



● For the computer user who has everything: a designer mouse. It's been created by Logi UK to celebrate its reaching sales of a claimed two million of the ordinary type.

The tasty three-button beastie has a see-thru case offering the unique opportunity of seeing "all the workings in all their glory". So with your very own eyes you can observe the dirt accumulating on the mouse's rubber roller. As is usually the case with such ploys this is a "limited edition" with a price tag to match: £99. *Call Logi on 0525 222211*

...Unix option looms

Rumours are rife that an A2000 with Unix compatibility is also on the cards from Commodore. That though is likely to be further into the future. A separate add-on should also be available for existing owners of the A2000. No details or prices are available yet.

Free Workbench upgrade?

The long awaited upgrade to the Amiga's Workbench operating system could be given out free to thousands of users.

Commodore brains are currently contemplating supplying the new software (version 1.3) through cover disks on 16-bit magazines such as ST Amiga Format.

Readers would then be able to send off for the manual and a utility disk for about £20.

Other ideas are also being considered, but new Amigas will automatically be supplied with the new software.

Laugh? I nearly didn't

Computer companies are hardly renowned for possessing any sense of humour but at least one firm has made an attempt.

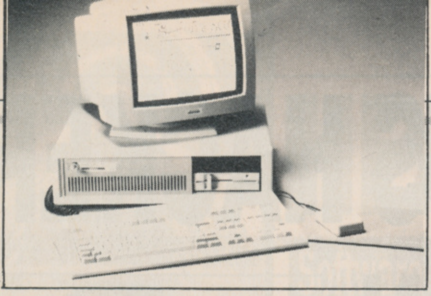
An American software house has launched a super-low-cost word-processor (just ten bucks a box) entitled *NerdPerfect*. The box itself is said to be nattily designed, but opening it reveals the naked truth: it doesn't actually contain a disk.

This, the firm reasons, makes the perfect humorous Christmas stocking gift.

Oh how the computer users will roar with laughter when they look into their festive stockings.

Meantime the marketing boys who dreamt up the idea will be scuttling off to the bank clutching their sides.

And the name of this enlightened software house? Vapourware. Very droll, fellows.



• Aries as it is now: upright disk drive to be offered soon

Watford's Tower

Upright disk drives and sophisticated security systems are being offered by PC clone manufacturer Watford Electronics for its Aries range of machines. But no price increases are planned for the souped up machines.

It is hoped that the trendy tower systems will replace Watford's normal desktop drives before the end of the year . They save space on the desk and tidy up clutter at the back of the PC.

Aries PCs will also be protected with digital number security systems as opposed to physical locks. Buyers will be issued with a personal number at purchase.

"It's a more effective way of securing your PC," said Watford's boss Nazir Jessa. "You enter the IDP number and the machine starts"

Jessa was keen to stress that no price increases would be drafted in. The Aries range was only launched this summer with entry level prices of £489 for the XT and £799 for the AT286. Watford – formerly entrenched in the Acorn market – has pitched its PCs directly against Amstrad.

So called tower systems were first introduced by IBM as an answer to the problem of huge drives taking up desk space and wires sprawling over a work-space. They can be sited under a desk.

Towers usually cost more than standard drives and haven't yet proved to be the runaway success many had predicted.

JAPAN TOO TOUGH FOR EA

Electronic Arts has quietly abandoned the Japanese beach-head it established only six months ago.

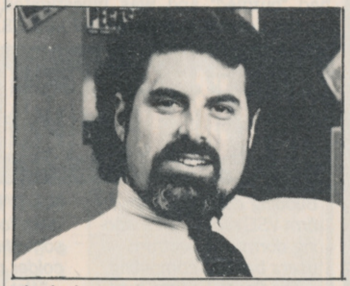
A development and sales team of around ten had been in place there in order to convert EA's software to Japanese machines and to take advantage of a predicted boom in PC sales. As it turned out, the PC did not become as prominent as EA had hoped. This though was only one reason for the pull out.

"It no longer makes sense to have development arms here, in California and in Tokyo," commented EA's Mark Lewis. "There was a lot of time spent in between and it's hard to control things if they are remote.

"We thought that the move towards PCs would be faster than it was. Unfortunately, things don't happen to cater for a single company's needs.

"*Chuck Yeager* did well over there but titles which reflected Western culture didn't do so well. It simply takes time."

EA's presence in Japan was never as large as here or in the US. The company will continue to export titles to Oriental countries.



• Lewis: Japanese retreat

MORE MEGS PER BUCK

Atari's new 30MB Megafile hard disk drive for the ST will cost £600 when it reaches the UK – the same price as the current 20MB drive.

However, Atari wants to get rid of stocks of the old drive before it drafts in the new version. How many of the 20MB versions are hanging around is not being revealed but supplies should have dried up by the New Year.

The high cost of hard disk drives on the ST has long been a bone of contention for serious minded ST owners.

It's a Miracle! A QL hard drive

QL owners have long been left out in the cold when it comes to hard disk drives.

But Miracle is currently beavering away on a 30MB offering for the machine which is likely to cost in the region of £400. Miracle was prompted into such a move after reading repeated requests for such a thing in QL specific magazines.

Developer Mike Tomlinson is confident there will be takers. "I read somewhere that there are 120,000 QL users in Britain," he said.

But Miracle is aiming for a more realistic sales figure of "a few hundred".

Goliath versus the giants

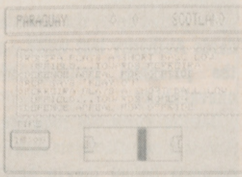
A tiny software publisher with a big name is hoping to deliver a shock to the games giants by snatching the Christmas number one slot.

Goliath Games is launching its successful football game *Tracksuit Manager* on the ST and Amiga and reckons that the big guns should watch out. *Tracksuit Manager* came out on the 8-bit machines at the end of the summer and surprised the world outside Goliath by reaching number one in the All Formats Gallup chart. It's still hovering around the top ten.

"We know the big companies have lots of money to spend on hype and we know that hype sells. But people loved *Tracksuit* on the Spectrum and C64. We expect it to be a challenger," said partner Doug Mathews.

Although Goliath published the 8-bit versions it has handed the 16-bit job over to the Alternative software label Again Again so that it can concentrate on programming.

"We've been so busy over the last two weeks debugging the program — we really do want to get it out before Christmas," added Matthews.



• Tracksuit Manager: Xmas biggie?

Shoot from the Lip... *the week's most quotable sayings*

"It's a brutal fascist regime stopping simple software coming in. The closest you get to seeing anything in the game is in your head."
Precision's Paul Burgess after the Porn Squad confiscated a batch of *Sex Vixens from Space* at Heathrow airport.

"It's a sign of the Amiga market being stronger that ST games are around £5 cheaper than Amiga games."
A Commodore person just about managing to convince himself.

"Costs are getting higher and that's why we're promoting £2.99 games. But £1.99 is a solid base for us and we'll be sticking with it for a few years yet."
Alternative's Roger Hulley responding to Code Masters' budget price hike to £2.99.

"You can almost feel the crowd pressing you forward as the goalkeeper tips a dipping shot over the bar. Stand back, and for a moment you'll believe you are watching a real match on TV."
ASL's dubious claim concerning *Emlyn Hughes International Soccer*.

NEW COMPUTER EXPRESS

OUR OPINION

Turning Japanese

In much the same way that precious few British computer companies have ever made that much of a splash in the States, so hardly any micro firms of any nationality have succeeded in Japan. And now comes news of the EA shutdown.

The reasons, superficially, are simple to rattle off. There are ideological, sociological, political, structural factors that make Japan a world apart when it comes to trading. Its insularity breeds content internally, but that makes it mighty difficult to crack for any Brit or Yankee firm. EA is but the latest in a long line to have to say sayonara.

The converse doesn't apply. The conventional view is that the British and Americans dominate the entertainment industry. But they don't. Nintendo records profits greater than the worldwide turnover of all the other leisure software publishers put together. Then there's the tidy contributions made by Sega, Taito, Capcom, Konami and all the rest.

Quietly, carefully, the Japanese have taken the commanding heights of the leisure world, and pretty much precluded the opposition in its home patch in the process. Over four years after the embarrassing flop of MSX, the sun is rising in the East with a vengeance.

It all goes to show...

With a bigger ramp-up than ever before, with more interest in the Amiga than hitherto, you'd expect that last week's Commodore Show would have had record attendances. Punters no doubt would be filling the Novotel to bursting point, traffic would clog the environs, a state of emergency would have to be declared in Kensington – that sort of thing.

But think again. Attendances were down, disappointing, below average, or whatever euphemism you care to use. Possibly that's because the Amiga is now so well established that people know what they can do with it. Possibly there's less need for the show, now that so many Commodore magazines have got their acts together.

More likely, punters were put off by the show's £5 price tag. Database: think again.

Not so weakly

From our initial sales figures, New Computer Express would already appear to be Britain's most popular computing weekly. For that, many thanks.

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AMIGA the word processor

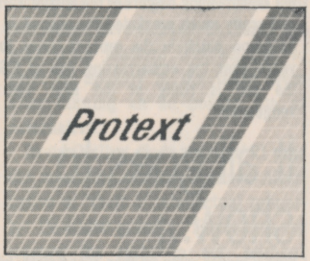
UK software houses have been accused of ignoring the Amiga as a viable word processor.

Arnor is making the claim in the week that it launches the Amiga version of its popular *Protext* word processor. The firm reckons that UK companies haven't recognised the machine as a business tool. "Most of the word processing packages have been imported from the States," explained Arnor's Douglas Thompson.

He added: "I think UK software houses have seen problems with the disk drive and haven't bothered to persevere." Arnor itself had a few hitches in development. Programmers were coming up against virus contaminated disks and losing days of work.

"They came across corrupted disks," said Thompson. "But I haven't seen any problems on the final product." *Protext* costs £99.95 and is already available on the ST, PC, and Amstrad CPC and PCW machines.

Arnor is on 0733 239011. Review of Amiga Protext next week.



• Amiga Protext: reversing a trend?

AMIGA the video machine

Video and laserdisk dabblers are being pitched with a new interactive media authoring environment which can control VCRs and laser disks via an Amiga.

Although evidently a complicated and new area the use of video on computers is becoming popular in the US and is reaching the UK. British firm Microdeal has now launched its *Viva* program which can generate interactive video and laserdisk programs with the added bonus of acting as a VCR remote control.

Viva was shown at last week's Comdex show in Las Vegas to a reportedly good reception. With a price tag of £399 Microdeal reckons it will be put to best use by educationalists, enthusiasts and businessmen.

WAR SECRETS HACKER COMES CLEAN

• Singh: Now working for the system

High profile hacker Edward Austin Singh has gone to ground after being hounded by the "sensationalist press".

However, he has detailed his future plans to *Express* now that police charges against him have been dropped. Singh is now working on a system to help large organisations and companies secure their data more efectively.

Singh came to the fore last month after it emerged that he had been hacking into British and US defence systems. He was caught after offering advice to the organisations which he had "burgled" and was investigated by the Serious Crimes Squad and US officials. Charges were dropped mainly because he had done nothing illegal.

"I've decided to stop giving interviews and to concentrate on my serious activities," he said. "The only reason why I've been doing this is because I'm concerned about computer security."

Singh will be emerging with the framework of a security system in the near future. "Hacking isn't an end in itself," he said. "There has to be someone who can do more than produce lightweight security systems.

"The press appears to be more interested in the sensationalist side of what I'm doing rather than what I hope to achieve," he said.

New life for dead Speccies

Budding computer repair firm VSE reckons it's wooing dormant Spectrum users back to computing.

The South London business – set up recently by two youthful entrepreneurs – claims to be inundated with Spectrum owners wanting their machines fixed.

"So many of them haven't used the machine in three years," said partner Tim Morris. "When they went wrong the machines were thrown in the cupboard. But we're fixing them for people who want something to do in the colder months.

"We've been so busy fixing 8-bit machines that we've had to ban STs, Amigas and PCs. We're such a small company that it would be impossible to take any staff on yet."

VSE was set up partly thanks to the South London business initiative and a large financial backer which funds such enterprises.

• VSE duo: Ian Vaudrey (front) and Tim Morris

The charges for getting your machine fixed at VSE range from £12.90 for a bottom of the range Spectrum to £31.90 for an Amstrad PCW. More details on 01 738 7707

Watch it, Mac, you've been touched up

Unruly computer companies were once again pulled up by the Advertising Standards Authority last week – mainly for the perennial problem of product unavailablity.

Despite numerous requests from the ASA that manufacturers stop advertising products before they're finished, complaints still come through from irate members of the public.

Various companies were pulled up for inaccuracies. The largest was Apple, which gained a slap on the wrists for claiming that one of its ads had been completely produced using Macs. A complainant exposed this as being untrue. The ad had been touched up with more expensive peripherals.

Z88 zooms into Europe

A spirit of internationalism is prevailing at Sir Clive Sinclair's Cambridge Computer with a flurry of overseas activity.

Its Z88 portable has just been shown in Germany and first batches are being shipped over. Also a Spanish launch should be under way before the end of the year. This will effectively make the portable available throughout Western Europe.

The machine is already sold in the US and Australia. and the Middle East is being eyed as a possibility for next year. Cambridge assured Express that even if it's launched there in 1989 or '90 the Z88 name will be retained.

• Z88: World view

Snippets

Anything to sell a disk

Manufacturer Maxell is offering a free Electronic Arts game – *688 Attack Sub* – with each pack of ten 3.5" floppies intended for use on the latest high-end PCs.

Unfortunately, the offer will only run here if it first proves a success in America.

Special K pack offer

Owners of Kuma's K-Spread 1 and 2 for the ST can upgrade to version 3 for £65 and £30 respectively. Otherwise the spreadsheet costs £89.95.

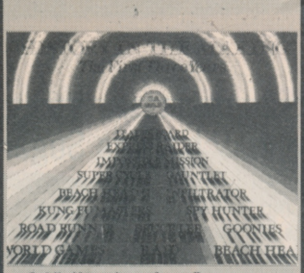
Newsbytes goes daily

Newsbytes, the "electronic newspaper" will be going daily come the New Year.

Currently a weekly, the service which is linked to Telecom Gold and Microlink is also undergoing a redesign in order to make it a little easier to read.

Eastern promise

Following hot on the heels of a patents deal with IBM, Taiwanese firm Mitac has unveiled its new range of 286, 386 and PS/2 machines. Thus far only the 286s have been priced. They'll cost £1,099.



• Gold's Xmas box of goodies

Money in the Making

Compilation-mad US Gold has come up with a chocolate box style compendium comprising 15 games from its three years.

All the games included have charted (and quite a few of them have already appeared on at least one compilation). Titled *History in the Making*, the compendium boasts the likes of *Beach Head*, *The Goonies*, *World Games*, *Gauntlet* and of course *Leaderboard.* Gold reckons the games have sold around 2,300,000 between them.

Available on the Spectrum, C64 and CPC, the four-tape box costs £25, with disk versions £30.

HEARTWARMER!

Software houses unite for kids

The fourth games industry charity compilation will be appearing next Easter – and autistic children will gain from the proceeds

Software houses in the UK are currently being wooed into submitting decent games for the compendium. It is hoped that the full line up will be announced at the industry's Christmas bash in London. Activision, Ocean and US Gold are likely to make contributions.

Previous software charity efforts have included *Soft Aid* which raised £350,000 for the starving in 1985. That still holds the record for the longest running Gallup number one clocking up 18 weeks. *Off The Hook* (to fight drug abuse) was launched in "86 raising £70,000 and then the comparatively disappointing *Kids Aid* last year which is said to have tipped the £50,000 mark. That effort was dogged by delays and absurd wrangles between software houses.

• Cousens: Helping hand

A March launch is most likely since that will avoid the pre-Christmas flood of attractive games. Software publishers will have more time to prepare a compliation in the early months of next year rather than in the summer.

The National Autistic Society will receive all profits. That charity was chosen for two reasons. "It's obviously related to children in the main," explained Mediagenic boss and charity organiser Rod Cousens. "There's also a guy called David Rowe who has done a lot of work for different software houses and has a two year old son, called Alexis, who is autistic. It's a case of human interest related closely to the industry."

Cascade dangles dongle at pirates

Fresh reports of the imminent death of the software pirate have reached our ears.

Cascade Games is developing a dongle – a device which plugs into a computer port and whose presence is verified by a program before it will run. The only way to pirate a piece of software supplied with a dongle – apart from cloning the dongle itself – is to isolate and rewrite the part of the program which does the checking.

The new dongle will be offered to software houses hoping to flout the code hackers. According to an optimistic Cascade, games utilising the dongle will be so hard to crack that hackers will "throw up their arms in dismay". This, however, is not the first such claim.

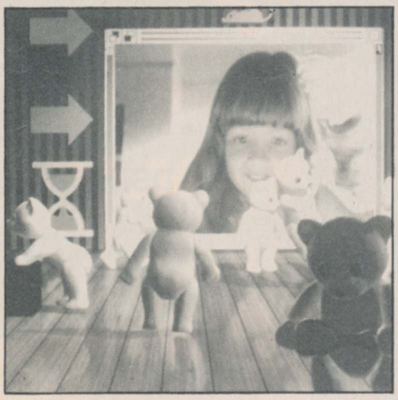
"Piracy is rife and any software house ignoring it is doing so at their peril," said Cascade boss Nigel Stevens. "This will take games hackers so long to crack that by the time they succeed it won't be worth it."

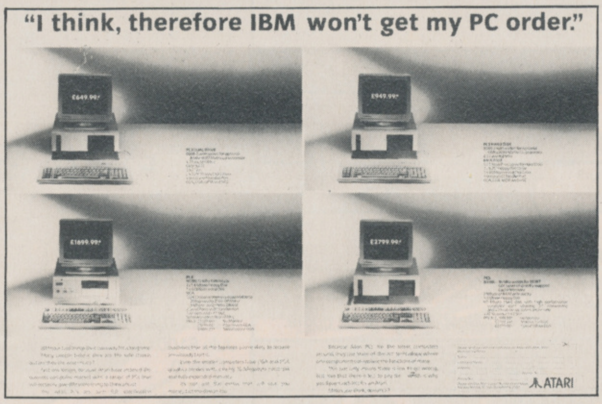
He added that even if a hacker cracks one game it won't necessarily help him on his next venture. Stevens though was careful not to give any further information away. "We haven't named it yet and I don't want to say too much."

The dongle will be mainly for use with 16-bit games. Stevens doesn't think 8-bit titles are worth protecting.

• Stevens: Pirates beware

Battle of the 16-bit ad-men




"I think, therefore IBM won't get my PC order."
£649.99*
£949.99*
£1699.99*
£2799.99*
ATARI

● Amiga owners (proud as they are of their machine's graphics capabilities) must have been astonished at Commodore's latest television advertising extravaganza. Graphics displayed on the Amiga's screen would have taken thousands of pounds worth of video kit and paint packages to produce, perhaps slightly beyond the budget of a typical buyer.

The dazzling high tech graphics are, says Commodore, an attempt to break the mould of normally dire computer ads. Not a reference to Commodore's famous elephant, surely?

● This exceptionally aggressive line from Atari is the attempt to make the suit clad millions think twice before splashing out on an IBM. PCs have never been Atari's strong point and the firm is setting aside a fair whack (i.e. £100,000 on this ad followed by £2 million in the national press next year) in the hope that the business fraternity will be swayed from opting for the "safe" IBM option.

The ad blitz will culminate in the *Which Computer?* Show early next year when Atari will be praying for big orders.

GAMES TOP TWENTY				FULL PRICE
1	1	Last Ninja 2	*Spectrum, C64, CPC*	SYSTEM 3
2	2	Football Manager 2	*Spectrum, C64, ST, Amiga, PC, CPC*	ADDICTIVE
3	3	Daley Thompson's Olymp. Chall.	*Spectrum, C64, ST, Amiga, CPC*	OCEAN
4	7	Out Run	*Spectrum, C64, ST, CPC*	SEGA/US GOLD
5	5	Taito Coin-ops	*Spectrum, C64, CPC*	OCEAN
6	RE	Fists 'n' Throttles	*Spectrum, C64, CPC*	ELITE
7	4	Supreme Challenge	*Spectrum, C64, CPC*	BEAU JOLLY
8	NE	Return Of The Jedi	*Spectrum, C64, ST, CPC*	DOMARK
9	8	1943	*Spectrum, C64, ST, CPC*	US GOLD
10	13	Road Blasters	*Spectrum, C64, ST, CPC*	US GOLD
11	14	Peter Beardsley's Football	*Spectrum, C64, ST, Amiga, MSX, CPC*	GRAND SLAM
12	9	Track Suit Manager	*Spectrum, C64, CPC*	GOLIATH
13	19	Gold Silver And Bronze	*Spectrum, C64, CPC*	US GOLD
14	20	Gunship	*Spectrum, C64, ST, PC, CPC*	MICROPROSE
15	17	Typhoon	*Spectrum, C64*	OCEAN
16	RE	Target; Renegade	*Spectrum, C64, CPC*	IMAGINE
17	NE	Pacmania	*ST, Amiga*	GRAND SLAM
18	RE	Bard's Tale	*Spectrum, C64, CPC, ST, Amiga, PC*	ELECTRONIC ARTS
19	13	We Are The Champions	*Spectrum, C64, CPC*	OCEAN
20	12	Elite	*Spectrum, C64, ST, BBC, Electron, PC, MSX, CPC*	FIREBIRD

GAMES TOP TEN				BUDGET
1	1	Joe Blade 2	*Spectrum, C64, BBC, C16, Electron, CPC*	PLAYERS
2	2	Bomb Jack	*Spectrum, C64, C16, CPC*	ENCORE
3	3	Footballer Of The Year	*Spectrum, C64, BBC, Atari 8-bit, C16. MSX, CPC*	KIXX
4	14	End Zone	*Spectrum, C64, CPC*	ALTERNATIVE
5	6	Gauntlet	*Spectrum, C64, MSX, Atari 8-bit, CPC*	KIXX
6	8	Advanced Pinball Simulator	*SPECTRUM, CPC*	CODE MASTERS
7	RE	Frank Bruno's Boxing	*Spectrum, C64, CPC, C16*	ENCORE
8	9	Ace Of Aces	*Spectrum, C64, MSX, Atari 8-bit, CPC*	KIXX
9	4	Commando	*Spectrum, C64, BBC, C16, Electron, CPC*	ENCORE
10	5	International Rugby Simulator	*Spectrum, C64*	CODE MASTERS

small figures – last week's position
NE – new entry
RE – re-entry

COMPILED BY GALLUP

Mirrorsoft claims ST supremacy

If Mirrorsoft is to be believed then more than one in five ST owners in the UK have bought *Dungeon Master*.

The game is alleged to have sold 30,000 copies since it was launched early last summer. Mirrorsoft has always maintained something of a high profile in the ST arena. The firm is caling Dungeon Master the best selling and most enduring ST game yet.

Last week the game picked up the Happy Computer award in France for Best Adventure with Mirrorsoft walking away with a total of four gongs .Tetris won two (Best Strategy and Most Original game) and Falcon was bestowed with Best Simulation.

• Vision: Another Amstrad basher

Vision PC takes on Amstrad

Yet another Amstrad-bashing PC will be arriving on the shelves soon courtesy of Vision Technology.

The Advent XT-10 costs £795 and runs at 10MHz with mono monitor, 640K of memory and a 30MB hard disk. A £1,000 XT is also to be unleashed with the bold claim that it's the fastest of its kind anywhere. An additional £200 will buy an EGA colour monitor.

Vision doesn't appear to be bothered that the market is absolutely crammed with low cost PCs of all shapes and sizes. "No-one else can offer that sort of price and performance," came the Vision line. "I can't think of anyone who offers 30MB storage at £795 with one year's free on site maintenance."

Vision Technology has been around for some six years supplying kit from the likes of Olivetti, Compaq and Tandy.

Murdoch takes Sugar

In their latest link up, media magnate Rupert Murdoch has called on Alan Sugar's firm Amstrad to produce a low-cost micro-based smart card descrambler for subscription satellite television.

The card is to be designed by Amstrad technicians and produced by British firm Paytel. It uses microchips to decode scrambled satellite TV channels paid for by subscribers – they will receive a new card once a month costing around £10.

Amstrad is of course already closely linked to Murdoch's TV plans. It is producing a £200 satellite dish to access Murdoch's four channels.

£10 off Beebulator

In a further attempt to get a foothold in the education market, Commodore has put forward a special offer on its new BBC emulator for the Amiga.

People involved in the education establishment can get a tenner knocked off the normal price of £49.95.

Apple's judge dread

The highly publicised "look and feel" case whch Apple has brought against Hewlett Packard and Microsoft has taken a curious twist.

Apple asked that the judge, Robert Aguiler, be removed from the Californain case when it emerged that his son works for Hewlett Packard. Whilst Aguiler insists that his son's employment has no bearing on the matter he has been replaced.

The look and feel case has attracted interest in all sectors of the media since Apple's case rests on Microsoft's and Hewlett Packard's products simply looking too much like Apple technology. If Apple wins it could affect copyright law many other areas than computing.

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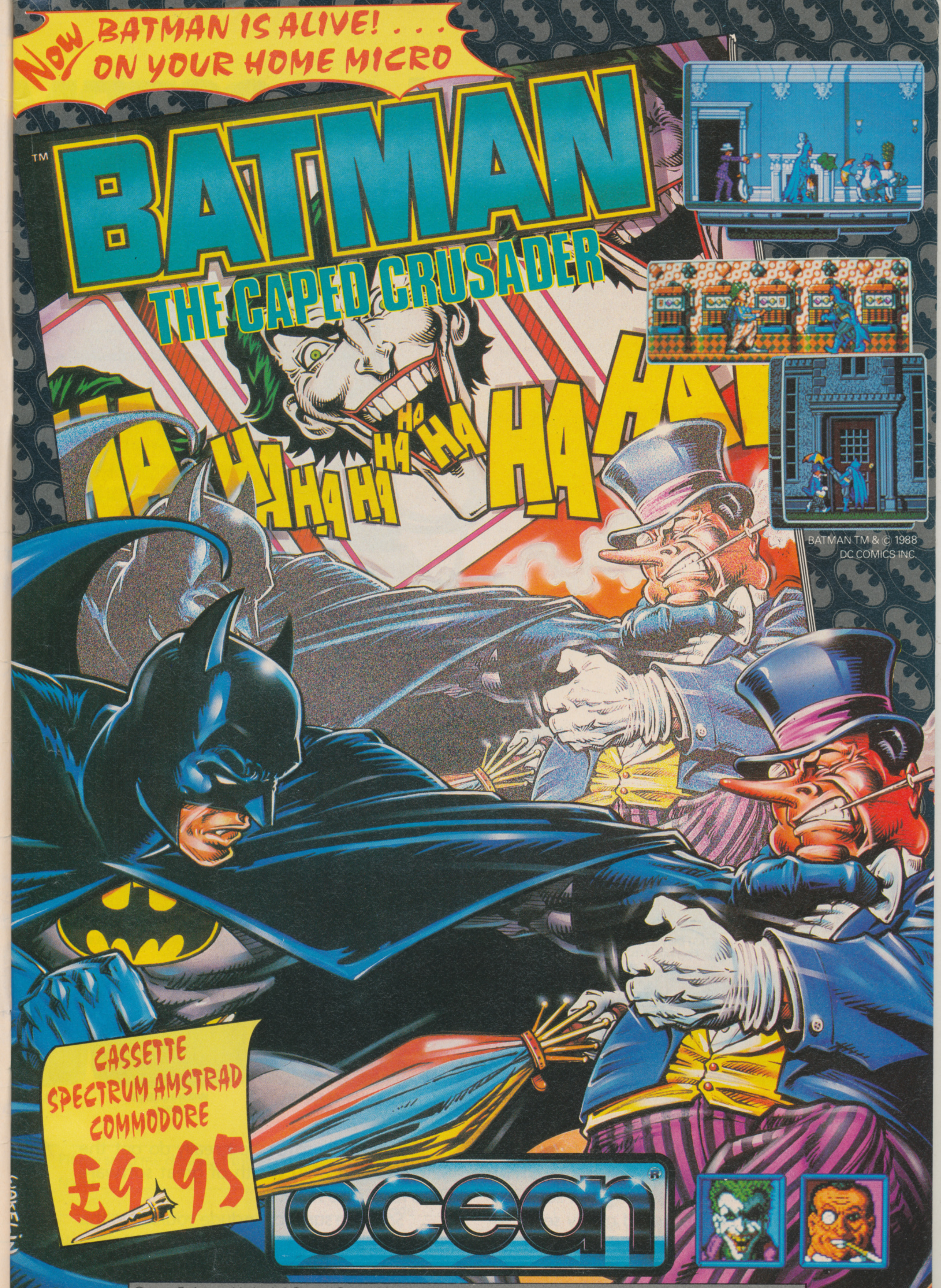
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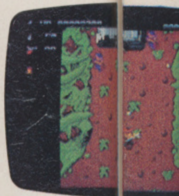

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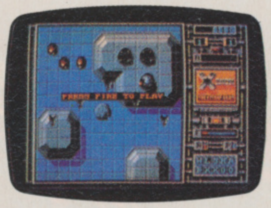

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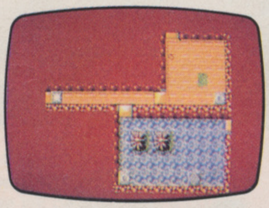

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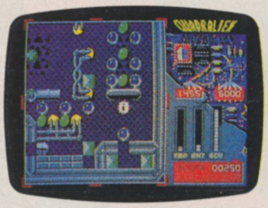

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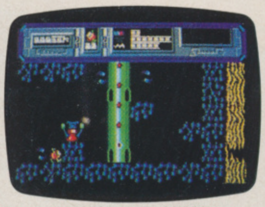

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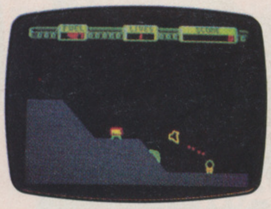

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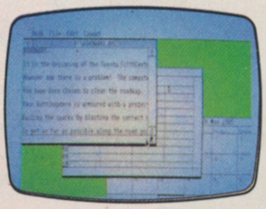

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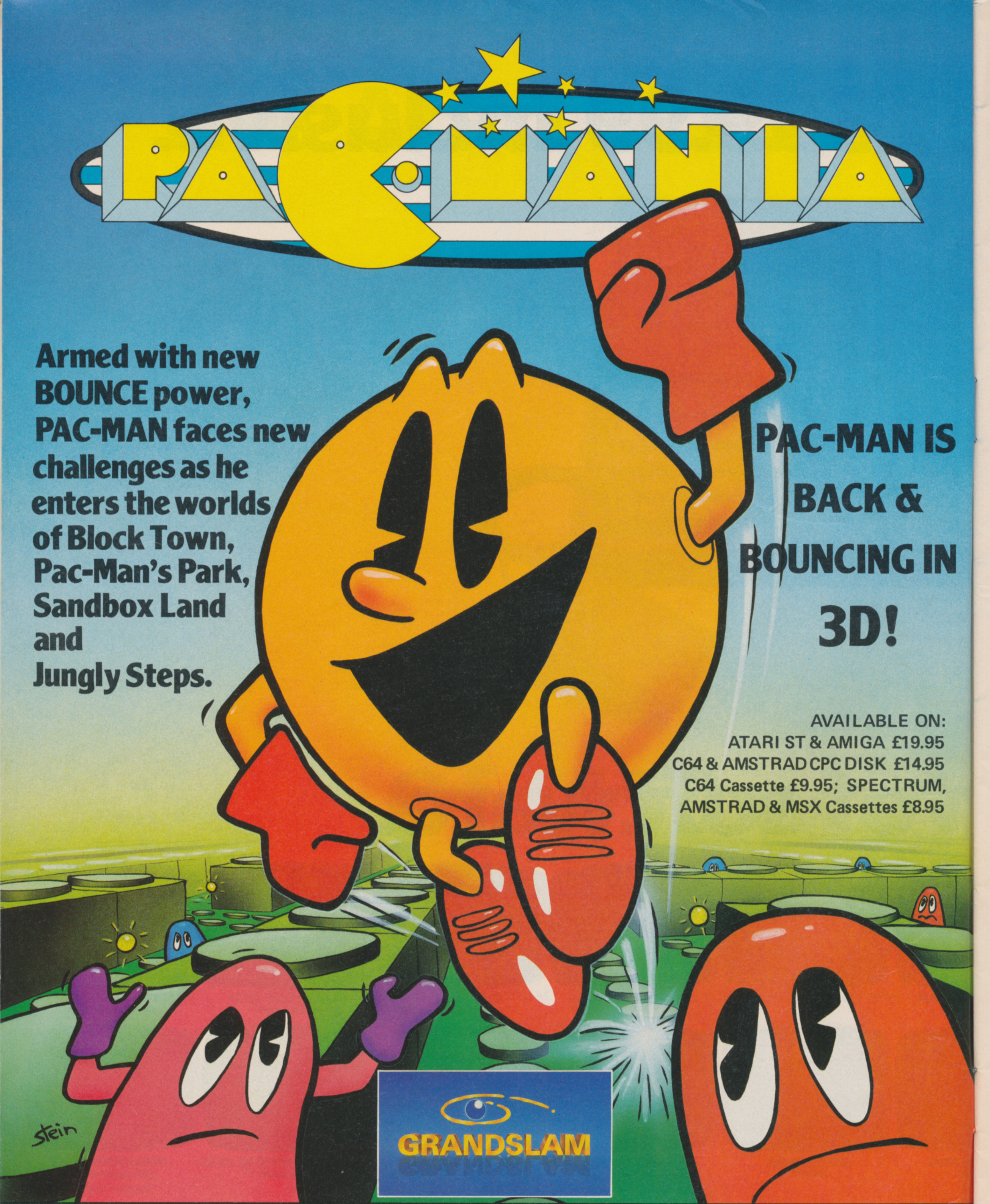

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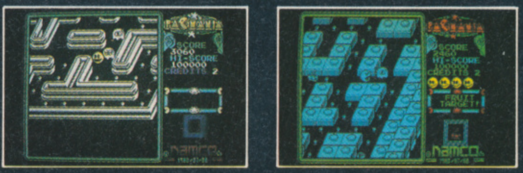


Screenshots taken from SPECTRUM

ROM for improvement

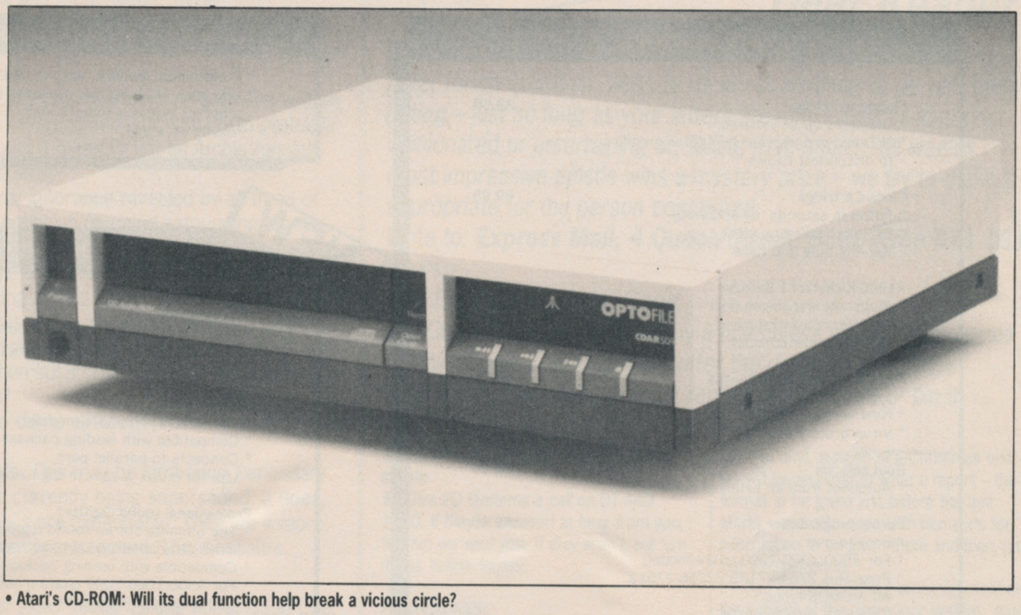
Atari is poised to launch its £299 CD-ROM onto a bemused world. There's been plenty of talk about this new technical phenomenon but little action. Can Atari change all that?

COLIN CAMPBELL reports.

CD-ROM is one of those quirky (and brilliant) ideas which isn't likely to do anything immense for a good decade. Currently it is suffering from a good deal of poking and pondering from the technical fraternity but the fact is that as a mainstream device it's got a lot of growing up to do.

Atari's £299 CD-ROM player may be the catalyst to break the vicious circle of hardware waiting for software and software waiting for hardware which pervades with all new technology. By launching the thing with the ability to play audio CDs Atari can rest assured that computer purchasers will have something to do on the gadget in the interim before good software comes along.

For the bemused, CD-ROM is a compact disk which holds stacks of information as opposed to dire *Dire Straits* albums. Whack the completely indestructible disk into your CD-ROM drive, connect up to a PC or ST, fiddle around with some software and lo and behold, there's the *Encyclopaedia Britannia* at your fingertips.



• Atari's CD-ROM: Will its dual function help break a vicious circle?

What's on offer

CD-ROM is enormously useful doing the things it's meant to. Journalists, engineers, lawyers, chemists all need piles of information at hand. The thought of a disk holding the equivalent of 1500 floppy disks, 270,000 pages of text, 5000 images or 16 hours of sound is appealing. In practical terms it's better than a study full of lovely musty books.

But even though the likes of Atari can market a CD-ROM drive for as little as £299, the disks themselves are expensive. It costs so much to collate all the data and – initially at any rate – only a certain number of people are going to be interested enough to buy.

Market forces dictate that the fewer the people buying something the more it's going to cost. So unless you all go out and buy a CD-ROM drive tomorrow it's unlikely that really useful and inexpensive databases are going to appear for a while.

At present much of what is on offer is very supecialised: a list of parts for a Boeing 747, all the drugs to cure Hepatitis, cases for the Crown concerning mortgage fraud. A more general offering is *Bookshelf* from Microsoft. It includes a thesaurus, dictionary, business information listing and literary style manual.

Eventually we might see things such as intelligent telephone directories (eg. tap in the phone number and get the address), all the hits in the pop charts for the past ten years (read the data or call up a clip from the pop video), or an interactive encyclopaedia in which you flick instantly to the part of a subject that you're really interested in.

Then there are games. Much has been written about the possibility of fully-interactive games using genuine video images stored on the disk. For example a space shoot-em-up using video images from *Star Wars*. But such games are a long, long way off, largely because the creation of one would be more like producing a film than publishing a piece of software.

Nevertheless firms such as Cinemaware have long been sitting on the edge of their chairs waiting for the right technology to come along. And even the generally cautious US Gold is "making a feasibility study".

A long way off

Another games software publisher, Virgin, prefers to concentrate on CD-Rom's more serious potential and is currently looking closely at the possibilities of scooping up the rights to various databases – what they are or what they might be isn't open to discussion.

"The volumes of CD-ROM drives here is teeny," says boss Nick Alexander. "Even on a worldwide basis. It'll take time to develop and I'd say there's not much in it for at least five years. But the technical superiority over a book means that a market will exist."

Alexander argues that just to look for one reference may well be easier in a book but to look for multiple references would be handled swiftly by a five inch database. "To look for, say, how many goals a player has scored over the past twelve seasons would be difficult in a book because of all the teams he may have played for. But CD-ROM would have all the data there." Virgin has no concrete plans at present for interactive CD. "It'll take a decade for the creative people to get to grips with it."

Alexander cites a "brilliant" book (from Microsoft) called *The New Papyrus.* It basically admits that a CD-ROM world is a long way off but puts forward arguments mapping out how, in the long run, it's possible that all our fine works of literature could be on wee silver disks as opposed to books.

For Atari, technical man Les Player explains why the firm has delved into this new area. Is it the early bird syndrome? "Well, you can play audio CDs on it. My wife would never allow me to buy yet another piece of computer equipment but if it plays compact disks as well..."

It rings true that someone has to release the hardware before software starts trickling through. No doubt there are plenty of hardened computer users verging on bankruptcy who are just itching for an excuse to get CD-ROM. Atari has proffered the excuse in the form of dual purpose.

But, for those jumping up and down impatiently waiting for a game virtually the size of the universe – it's worth sitting tight or at least getting used to what's on offer at the moment. The CD-ROM revolution isn't quite upon us. ●

Questions & Answers

How do I buy a CD-ROM player?
Without wanting to put too fine a point on it – you've got problems. Major CD companies such as Philips and Hitachi have players but they're in the corporate price bracket. And Apple has a model – that though is only for the Macintosh.

Atari's £399 offering arrives next year and – according to the company – will be easily available. Atari reckons it'll shift more than 10,000 units by this time next year. By then you may be able to get it on the High Street. It would be foolish though to rule out delays.

Will it work on my machine?
The standard Philips school of CD-ROM drives will work with any MS/DOS machine without headaches. Atari's is made with the ST specifically in mind although an interface will be available to hook it onto a PC. Other machine owners may have to wait for interfaces to appear from either Atari or from third party developers.

What applications are available?
Not many and they're expensive. *The Encyclopaedia Brittanica* in book form costs something like £900. They're not going to sell that info on any medium for much cheaper. The very near future will almost certainly see the CD-ROM-based-dictionary and thesaurus, with less general databases appearing in the fullness of time.

For programmers there looms a CD disk holding a plethora of manuals. Developed by Microsoft it's currently only available Stateside where it costs $395.

How useful will CD-ROM be to me?
If you need a lot of data at hand then it'll be a godsend.

The trick will be to know how to take advantage of indexing. You'll want to customise your machine and CD-ROM so that info can be found swiftly.

It's worth remembering that you're really only dealing with a great big hard disk drive.

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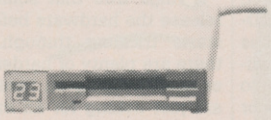

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Mystery WINNER prize

Forgive me for being a little slow in picking up your new publication. I mainly use a PC while using a BBC and PCW at work so your magazine has obvious attractions for me. I especially liked the article on graphic displays as it compared PC graphics with other machines (why no mention of the BBC?). More such comparative articles, please.

Regarding your article on CTCs and Archimedes, surely schools have been lumbered with Acorn for long enough? Despite the obvious immorality of the principle behind CTCs it seems a pity they are unable to learn from state schools.

OK, Archies are superfast. OK, they have virtually no software written for them which takes advantage of this speed. OK, you could probably buy three PCs for the same amount it takes to get an Archie running. Apart from that, what's the news story?

The news story was the abysmal ignorance revealed by all three of your 'voices in the debate'. The politician revealed astounding bigotry. The Head showed no understanding of I.T. The industrialist seemed to think that schools should train his workforce. We already know that Britiish industry has the worst training record in the Western world. Why do people like Alan Carter think this is the responsibility of the schools?

Is it any wonder that, despite high productivity, British industry is outperformed by its competitors when such crass opinions are expressed by those in managerial positions?

Part of the solution would be to dump all Acorn products on the Primary schools, where they belong.

Install PCs in Secondary schools. This may be lumbering Secondary schools with a technology that is currently being superseded. It does, however, provide a way ahead. PCs are expandable. They are a more realistic technology than the currently-entrenched 8-bit dinosaurs.

Bill Brooks, Eastbourne

✓*1. You haven't really been that slow. You're talking about Issue One.*

2. The graphics piece didn't mention the Beeb for the moderately valid reason that it was analysing graphics standards on the PC.

3. The abiding Acorn/education connection has doubtless caused much merriment to a certain Cambridge-based computer firm, whilst baffling or even exasperating the rest of the world. Presumably there was once a semblance of logic in the original thinking. These days, the connection is nothing short of perverse.

Congrats on your prize – we're sending you a wonderful PC package from Epyx called Print Master.

PLUS POINTS

Please could you tell me what kind of computer the Commodore Plus/4 is – eg, an 8-bit or a16-bit machine? And please could you tell me where I can order software, or if I can use any other kind of games. And please tell me if I can use my computer as any other kind, if so please tell me how.

A. Redmayne (no address, the shy thing)

✓*In the great scheme of things, the dear old Plus/4 is really more of a two-bit computer than anything else. Technically, it's an 8-bit beastie, and a pretty much dead one at that.*

C16 stuff is the only other software you can run on the Plus/4, and there's not exactly a deluge of that around these days. Capri Marketing on 06285 31244 should be able to help.

No, the Plus/4 cannot be used as "any other kind" – not unless you bolt an Amiga onto the back and then throw away the Plus/4.

LAWYERS DRIVE ON

I read with interest the article by Richard Monteiro in *New Computer Express* of November 12.

I have written to Supra in Oregon, USA, to inform them that Third Coast Technology Drives are indeed brand new as is every other component used. I have further informed them that unless a retraction is published in yours and like magazines forthwith, I shall have no option but to instruct our American lawyers to sue.

TCT, a subsidiary of Metcom IBC (Europe) Ltd enjoys excellent purchasing facilities within the industry, which allows the low prices to be passed on to the customer.

I trust this sets the record straight.

JC Millar, Metcom IBC Europe, Wigan

✓*What a rum situation indeed. Here we are in all good faith passing on the claim (and it was quoted as a claim) from Supra's UK agent Frontier about Third Coast Technology, and then all of a sudden m'learned friends in the legal profession are set to get involved. Perhaps Frontier now rues saying what it did. Whatever, normal service will be resumed shortly.*

IN SEARCH OF TOOLS

I have read through your preview issue of *New Computer Express* (free with December's issue of *ACE*) and my attention was drawn to an article on page nine under the heading of "Finding the right tools for the job".

We are a software development company with a major part of our work based on Z80 hardware. I would therefore be interested in finding out more about the Programmer's Development System described in the article, and would be pleased if you could forward the address and phone-number of the manufacturer of the system to me.

Julian Rivers, Telefax Holdings, Whitstable

✓*Give PD Systems a call on 01-440 1130. If they're pleased to hear from you, tell 'em we sent you. If they aren't, tell 'em it was Yellow Pages.*

FLARE'S FAIR

Hey, nice mag. Runs rings around *Computer Gamesweek* (*That's enough damning with faint praise – Ed*). But what's happened to the Flare One computer? It was reviewed in *ACE* not long ago. Could you please give us an update on any unreleased machines such as the ST Plus, 32-bit Amigas and the PC Engine, or at least confirm their existence. Will Flares really come back into fashion?

Many thanks.

Mike Judd, Shenstone, Staffs

✓*Opinions divide on the Flare. Either it is an extremely exciting technological breakthrough that should set new standards for games machines and should be appearing at some stage in the near future, or else it is an extremely exciting etc etc that will never appear in a commercially saleable form. As* Express *revealed last week, elements of Flare's work will be appearing in the new Konix console, which is a small morsel for the legions of Flare fanatics to get their teeth into.*

Other machines: all exist (and not just in the minds of their would-be sellers). Rest assured that Express *will be the first to carry the details of the eventual UK launches.*

dBASE CHORE

By December 9th I have to find out as much information as possible on *dBase III* and *IV*: their history, what they do, and their applicability to given situations. Needless to say, the few books in my college library disappeared before the lecturer had finished speaking, and very little appears to have been published in any case. It would appear that *dBase*'s November 1st deadline has come and gone, and so far all I have seen is an advert in your magazine quoting a price tag of £472.13.

I am studying for an HND in Computer Studies at Norwich City College and I would appreciate any help (or any ideas where I can get any). Instead of a Christmas test, we will be required to write a report – the format to be given just before the test starts – and also cope with demands for information to be given there and then, just like the real world.

As I am just finishing an assignment on the subject of the operatimg system. Your explanation in *New Computer Express* will furnish me with an extra source for the Bibliography and perhaps a bit of one-upmanship. I also found it very helpful.

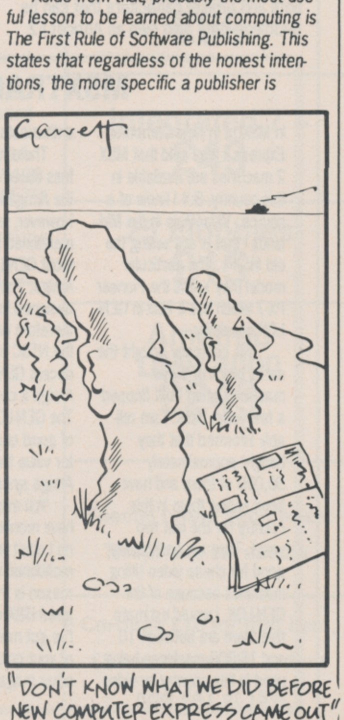
Long life to your new venture.

Jaqueline Denny, Norwich

✓*One obvious line of enquiry would be to phone the firm behind* dBase, *Ashton-Tate on 0628 33123. Alternatively, Microsoft Press (0734 391123) published a useful little number called* Programmers At Work, *including an interview with the original* dBase *author.*

Aside from that, probably the most useful lesson to be learned about computing is The First Rule of Software Publishing. This states that regardless of the honest intentions, the more specific a publisher is

☞



"DON'T KNOW WHAT WE DID BEFORE NEW COMPUTER EXPRESS CAME OUT"

☞

about the date for its next product, the more likely it is to be late. Usefully, it applies across the whole gamut of software firms, from budget games pubklishers up to the serioso full-blown companies.

THE GREAT DEBATE SCOTCHED

First off, congratulations your first issue. I have been looking for a magazine which not only covers games but also news and coverage of the whole computing scene. And weekly too!

Secondly you're bound to get the usual letters from C64 and Speccy owners slagging off each other's computers. I can put a stop to this before it starts! I own a Speccy +3 and my brother has a C64. They are both really good computers and, as yet, not worth selling for 16-bit machines until those are properly established and their prices have come down (both hardware and software).

Gary Chase, Selsdon, Surrey

✓*Well that's it then: the whole of the games hardware scene summed up in a few sentences. The Spectrum and 64 are equally good, and both are better than any 16-bit upstart. No doubt the vast legions of* Express *readers will all agree.*

● THE GREAT PURCHASE DILEMMA

A NOVICE WRITES...

I noticed your article for beginners in *New Computer Express*, and thought that this is exactly what I need. Having no experience, and no computer, I am at a loss to decide what to buy. I list below the relevant criteria and would ask for your suggestions regarding type and make of computer.

A • Price guide – up to £300-£400.
B • I am 14 and have just started learning about computers at school and I am interested in programming.
C • Games.
D • Educational – I also have two sisters six and eight who would probably use it.
E • Should I get colour monitor or use colour TV?
F • I would like a disk drive if possible within price range.
G • I use a BBC at school.

I hope you will be able to assist me in making a good choice as I find all the different computers available very confusing.

Good luck with the new magazine, I'll certainly be buying it.

Matthew E. Medley, Upminster, Essex

✓*Choosing a computer can be a bewildering and sometimes frustrating experience – that's why we presented the complete guide to selecting a computer that's right for you in last week's issue..*

In that guide we recommended the Atari ST as the best all round choice. But because of your circumstances the Amiga would probably be a better bet – it's just within your budget.

The Amiga includes an excellent version of Basic and you can buy other programming packages – normally priced around the £50 region.

The current situation for games on the Amiga is very encouraging – you won't get better graphics anywhere. Software is expensive though, the average price being £25.

Commodore is due to bring out a £50 BBC emulator for the Amiga early next year, allowing you to run most BBC Basic programs from school at home – an obvious attraction. However it's not yet clear how many commercial BBC software packages the emulator will run. Your younger sisters will probably find it as easy (or difficult) as any other computer – it just depends what software you have running on it.

The Amiga's TV display is OK for many uses, but if you really want to gasp at the graphics, try to save up another £300 or so for the colour monitor. Next year, perhaps?

ANOTHER NOVICE WRITES...

Could you advise me as a 1st timer a good computer to buy? I would like to use it in conjuction with my small business so I would like it to have word processor capabilities, have a disk drive and use a colour monitor. Finally my daughter of 6 has started to use a computer at school so I would like her to be able to use it for games and learning (BBC compatible). I do hope you can help.

S.R. Foy, Surbiton, Surrey

✓*If full BBC compatibility is crucial, you'll need to buy a BBC machine. A 128k BBC Master Compact with 3.5 disk drive, 14 inch colour monitor and Acornsoft Viewmaster Professional word-processing software would set you back about £550 ex VAT.*

However, if it's mainly for business use, you'd be much better off buying a PC – for example the Amstrad PC 1640 (preferably with a hard disk drive). It may only be word-processing you want the machine for at present, but having a PC will give you the option of doing virtually any business task you like.

There's a growing range of games and educational software for the machine, and you can get some crossover with the BBC through a £100 software package called BBC Basic 86 (from M-Tec on 0603 870620).

SOMETHING I LIKE

As innocent as the day is long I slipped into my local newsagent and something caught my eye. A quick as a flash I thought "that's different!" Yes, it was different. At first sight it looked like another magazine, but the price was wrong – 48p. So let's give it a whirl.

I have found something I like. I purchased *New Computer Express* at about 17.30 today, and it is now 20.30, so I have obviously been motivated to sit down and jot this diatribe.

What I found about the magazine was a layout and presentation that appealed particularly to me. I do have criticisms of a minor nature that may be worth expressing, but generaliy I liked the price, the presentation and the balance between the articles.

I am a confirmed Sinclair addict, having been led into the dissolute life through the MK14, ZX80, ZX81, Spectrum (I own the "Fiddlers delight" model – ie the one so early in the production range that it has pots and pre-set capacitors that can be twiddled). But I also own an Apricot F2 512K DDD, have access to an Amstrad 8512 and recently purchased – Special Offer: It's a Bargain – a Spectrum 128.

I am not a great computer games player, although I find some of the games/ simulations quite addictive. It does seem to be a pity that almost all the magazine articles and software available for the Spectrum are at aimed at games players rather than those with more serious thoughts in mind. The same is probably also true of the majority of software available for the more popular computers.

As computing in all its aspects is my main hobby and is also important in my work, it is fairly critical for me to be aware of the current trends in the marketplace. An in-depth study of everything available is obviously not possible, but an indication and/or opinion from *New Computer Express* will give me a lead to areas that would require further investigation.

I do get very annoyed with the esoteric jargon that is used in much computer literature, in particular CP/M and MS-DOS. My background is technical electronics and I find KISS (Keep It Simple, Stupid) an invaluable way of working.

A prime example of this my complaint was that after spending a number of hours reading through a massive tome that claimed to be *The Complete .... Reference Manual*, I appeared to be on the verge of discovering the information that I had been searching for only to come across the sentence "that of course is beyond the scope of this manual". Need I say more. It was good to see an attack being made on this front with The Learning Curve in Express.

I do hope that this magazine can continue and improve on its original form. At the moment I like it and shall continue to buy it.

R. Diamond, Guildford, Surrey

✓*KISS also stands for Keep it Short, Stupid* ●

MSXTRAORDINARY I

In MSXtra in *New Computer Express* it was said that MSX 2 machines are available in this country. But I know of a source - VideoQuip in the Midlands - that is still selling the old MSX 1. The particular model they sell is the Pioneer PX-7 which has a built-in GEN-LOK capability.

This company bought the entire stock of these machines when MSX flopped a few years back. I am reliably informed that they bought approximately 30,000 of them and have been selling them in this country for the last two years. They are particularly good for cheap video titling machines because of the GEN-LOK. I would estimate that there are between 10 and 15,000 machines being used in this country by video enthusiasts.

There has been a lot of fuss about desk-top video on the Amiga in recent monhs. However, what is not usually mentioned is the quality of most GEN-LOKs for the Amiga. They are usually designed for the USA and are therefore only really good on the NTSC standard. For a decent GEN-LOK on the Amiga it costs about £600. The GEN-LOK on the PX-7 is of good quality and is far better value than the equivalent Amiga system.

You may wonder why I have mentioned all this (and no I don't work for the above mentioned company). The reason is that I haven't read a good MSX column in ages. I've got more useful info out of your column than most other magazines (weeklies at 70p, no names mentioned) usually have in their entire news section. Therefore I thought I'd give you some information back.

Ian Harrison, Accrington, Lancs

✓*It's one of the abiding marvels of the computer world that the MSX owners are still so vociferous about their machines. If all the other owners of all the other machines made half as much noise, we'd all go deaf.*

Still, you probably have to make a racket when so few of the commercial companies have been listening for so long.

We'll doubtless have yet another MSX letter appearing immediately after this one.

MSXTRAORDINARY II

Congratulations on a very interesting magazine. I had never heard of *New Computer Express* until I read about it in *ACE*, so I am not sure how many editions you have published. How much is your yearly subscription?

I am pleased to see *New Computer Express* supporting the MSX, and noticing that it is a computer with a lot of potential.

I run an MSX magazine called *MSX Gazette* and would like to know of any addresses which could be of use to me. If you would like to let your readers know of *MSX Gazette*, I would be most grateful. Here is a little information on my magazine - *(No there isn't. That's enough plugging - Ed).*

MSX Gazette has also started a tape club (free membership) for MSX owners only. At present only MSX 1 tape programs are accepted, although we are planning to extend to the MSX2, and to the MSX2+ if released. Thanks to a member in Malta, I should soon have speech incorporated into my programs. The tape club is called MSX Operating Games (Mog for short). We are looking for programmers to write some good software for us.

Thank you for supporting the MSX. Keep up the good work.

Robert Wilson, Hastings

✓1. Express *was born on November 12th, 1988, after its preview issue had been bundled with* ACE.
2. Subs are so ridiculously worthwhile that we've already had fistfuls of blank cheques on the off chance. That may be a mild untruth. But what is definitely not open to doubt is that an Express *sub at just £24.95 annually represents at extraordinary bargain. Honest.Use the card on the back of this issue.*
3. I don't think we'd go quite so far as to say that the MSX has 'a lot of potential' – if only because of the lack of support from most UK software houses. Let's just agree that it has a lot of letter-writing supporters.
4. MSX Gazette *sounds like just the sort of publication for us, so do send a copy. To save you all writing in,* MSX Gazette *lives at 27 Reedswood Road, Hastings, East Sussex TN38 8DW.*

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A legend in his own

In the first of a major Express series, one-time Amstrad man William Poel charts the early days of the

The Alan Sugar Story

Beetroots. Not exactly the most pre-possessing of objects, and not exactly the most obvious basis for the greatest commercial phenomenon in the UK computing world. But beetroots it was that started the young Alan Michael Sugar off in his quest to make inconceivably huge piles of cash as quickly as possible. And never underestimate a man who can turn the dullest of vegetables into money in his early teens.

Alan comes from a very typical East End background, born (under lucky stars) in 1947 in Hackney. Both parents worked in the rag trade, but from an early age young Alan caught on to the opportunities that exist around us all to trade in just about anything where a market can be found. The tales of his early business exploits are legion and legendary in the classic "East End boy made good" style of anecdotage.

Alan's first trading exploit was to boil beetroot for the local greengrocer, getting up at a ludicrously dark hour of the early morning to do so. Then there was the photographic phase and the repackaging of bulk film. Meantime he obtained a number of O-levels, and although stories differ on this next point, I believe he also has three science A-levels.

But whatever the actual detail, it should be clearly understood that despite his cultivated street trader approach to business and his disdain for intellectuals and "boffins", Alan Sugar's no academic slouch – one reason why he manages to maintain the whip hand so readily over his suppliers and staff. Never underestimate his mental agility.

Had he been as motivated by the prospect of certificates and academic achievement as he was by money, he would be a professor of his chosen subject by now – and about £500,000,000 poorer.

Money won hands down. Since his family background was by no means deprived, the Legend of Alan reveals no particular motivating force for his desire to get his shovel into huge mountains of money, other than a larger than average desire for the better things in life. And rather more of them than the next bloke, please.

Aerial assault

Alan moved along into another good Jewish tradition in the East End, and worked with an electrical wholesaler. This led to the famous phase of selling car radio aerials from the back of a van, and many small electrical shopkeepers round East London can remember the days of having to give this energetic young lad a shove to restart his van (why pay good money for a new battery when you can get someone to shove it for free?). From there, it was a short step to wheeler dealing in that notorious street of high tech tick tackery, Tottenham Court Road.

By keeping overheads low and applying his brilliant salesmanship he could form Alan Michael Sugar Trading by the age of 21. And using his astute observation of the marketplace and where opportunities arose, Alan had launched into several niches in the audio trade.

After the legend of the aerials came the legend of the plastic record player covers. A £5,000 investment in tooling produced a player top for around 50p a moulding, and this sold for up to £15. This confirmed in the young Sugar's mind that the way to make serious money was to make huge profits, and to avoid any use of his rapidly growing capital that did not reflect around a 10,000 per cent return.

This was an important ground rule fixed in the corporate philosophy. If you can't earn at least 30 per cent from a product, get out, and find somewhere that you can. And the other keystone in his philosophy: the world is full of mugs willing to work for peanuts, so let them.

Today's Mr Sugar also kids his audience that attention to detail was one of the factors in Amstrad's success. Frankly (a favourite expression) that is a load of crap (another favourite expression); attention to detail only came with the computers after getting a severe drubbing in the audio market because of a total lack of attention to detail.

The Mug's Eyeful Tower

Anyone who ever owned one of the earlier Amstrad audio products will realise that the next step along the road for Alan was the conception of the Mug's Eyeful.

The Mug's Eyeful is where Alan's brilliance really shot to the fore. Take an expensive audio product, reproduce its facade, shove in something salvaged from a tinny radio chassis, and the lorry driver and his mate will come flocking. It's just like the backlot film sets where the front of the *Gone With The Wind* mansion is in fact a plywood mockup, propped up by a load of four by two.

The equipment looked a million dollars, but actually cost very little. Outlets at places like Comet and Rumbelows were sold the product by Sugar's superb salesmanship, and the trip towards flotation as a public company was well under way.

Basically he looked at the Japanese route to success and did a very effective imitation for himself. He might correctly be described as Britain's one-man economic miracle.

But all the time the kosher piano was playing frantically away in the background, Alan continued to take short cuts with etiquette and the finer points of English management technique. His abrasive and direct manner lead to problems with the old school, although all those with whom he does business have nothing but praise for his integrity and reliability.

Sugar's general view of business progress is based on need-to-know. He managed to surround himself with a relatively unqualified but highly loyal staff who exhibited the key ability to learn as they went along (with a couple of exceptions). As new markets appeared and new products were devised, Amstrad boys picked it all up as they went along: but computers were a different thing as we shall see.

However, the cloning of the expensive look took a step back when blatant copies of one expensive Japanese loudspeaker design led to an order to destroy a ton or two of the Amstrad look-alikes. This lesson was well learned and Alan then took a closer interest in copyright laws and made very certain that when the foray into IBM land came along, he was properly prepared. Before then, though, he had a more elementary battle on his hands: how to launch Amstrad as a computer manufacturer, just when the bubble was beginning to burst for Sinclair, Commodore, Acorn and Atari. ●

This charming man

Alan Sugar is impatience personified. He usually doesn't bother to say "Good Morning" on his hurricane-like progress through the building to his penthouse. The debate as to whether this is actual boorishness or an eccentric obsession with the myriad pressing matters that surround a huge business revolving around one man's judgement continues.

It's quite possible that Sugar feels that manifestations of common courtesy after all this time would cause serious concern that he's getting soft in his dotage. In his personal life (very well hidden from his public life), he is a model family man, with a stable marriage that goes back to the days before anyone could possible accuse Anne of marrying the old man for his money. This tends to support the view that Sugar's abrupt behaviour is a carefully studied and cultured approach to intimidate and inspire.

Inspire he certainly does. His core of long term staff (lifers) continues to treat him with a reverence usually reserved for a religious leader. In a way, this is a serious parallel, and the object of worship at Amstrad is profit. The burning question is whether or not the operation is so utterly obsessed with profit that the Amstrad mob would desist from armed robbery if they were 100 per cent certain they could get away with it.

Uncertainty on this score is what probably unnerves many of the genteel city observers, whose own particular brand of unarmed robbery has a social acceptance amongst their peers.

The five quid a second approach to making money

Let's get one thing straight. Alan Sugar deals with computers much as he does any other commodity, as a means to an end; and the end is profit. Huge, grotesque, unimaginable and enormous amounts of it. Amstrad regularly achieves the impossible in terms of the net margins it maintains on its trading, doing at least twice as much as conventional wisdom would believe possible.

The profits accrued are too huge to be meaningful. In its last reported figures for the 12 months to June, Amstrad made £160,400,000. That's the equivalent of £439,452.05 each and every day of the year. Or to put that another way, Alan and the boys make £18,310.50 per hour, even when they're not working. And further, that means £305.18 per minute or even £5.09 per second tips into the Amstrad coffers.

So by 9.00 am on January 4th 1989 when most normal folk will only just be starting the year after the holidays, Amstrad will already have notionally earned the pretty sum of £1,483,150.65...

launchtime

Sugar empire. This week, from beetroots to hi-fi battles.

Men maketh micros

Some men are born to have difficulties with selling micros, some achieve difficulties and some have those difficulties thrust upon them.

The UK micro computer industry has been a curious contrast of personalities. All have had great ideas but then all have had even greater problems. With the exception of a certain Mr S., all have flirted with financial death. Some have even succumbed.

Firstly, there was the urbane, reputedly insufferably arrogant self styled guru and visionary Sir Clive Sinclair. He may not quite have been only the boffin of popular imagining, but he needed a Sugar in shining armour to keep him afloat. Then up popped the terrible twins of Hauser and Curry. They can thank the patronage of the BBC for rocketing Acorn from obscurity into a wasteful monopoly of the educational sector, thereby putting a whole generation of UK computer users behind the competition around the world while the IBM PC became the standard.

At the business end, there was the down to earth Brummie accountant who nearly made it huge, but insisted on being just different enough to nearly sink Apricot: Roger Foster. He, at any rate, is bouncing back these days.

All have been off-stage bit-part players in the Alan Sugar Story. He'd've succeeded without them, of course, but their considerable troubles made it that much easier for the Sugar takeover to occur.

NEXT WEEK: The birth of a notion. Demystify computers by bundling the CPU, monitor and disk drive/cassette together, make it all run from one plug, ramp up the Amstrad marketing machine behind it, and you're onto a winner with the CPC. But it wasn't quite as simple as that...

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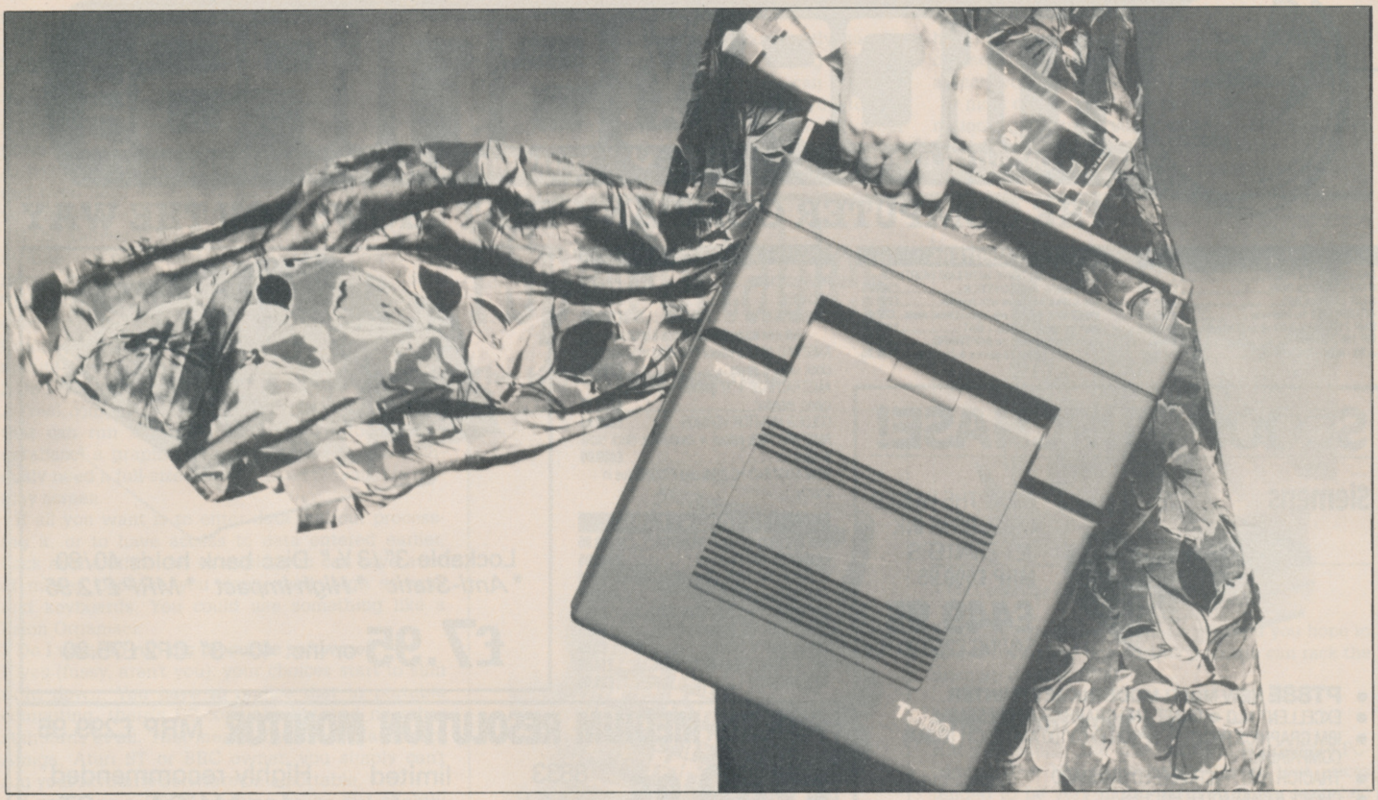

Carrying all before you

Peter Worlock presents a moving guide to the world of portables

Computing on the move has always received a disproportionate amount of coverage when reckoned against public interest, largely because it is computer journalists who are most in love with the idea.

But portable computers have come into their own in the last year or so, with industry giants like Amstrad, IBM, Compaq, Toshiba and Sharp offering products from tiny hand-held machines, all the way up to desktop systems that you can carry around with you.

There remains the question, though, of whether the ordinary user shares the manufacturers' enthusiasm. In a general, idealistic sort of way, we'd all love an all-powerful, fully-featured computer the size of a Walkman stereo, but today's machines are a long way from that dream.

The question is – allowing for compromises – what can a portable do for you? Could it change your life? Do whole new vistas of computing power and flexibility stretch before you? Or are portables just another way of separating you from your money?

Points to ponder

The difficult thing about choosing a portable is trying to clearly establish what you need, and that will depend not only on what you intend to do with the machine, but how you intend to do it.

For example, if you want to literally compute on the move – the rather cliched scenario of the businessman writing his sales report on train or plane – your choice will be very different from mine, when what I want is a machine I can simply move around from home to head office, to branch office,

Portable portraits

Michael Maykit: The Salesman

A go-ahead, thrusting salesman, Mike will definitely make it in the corporate ratrace thanks to his portable PC-compatible.

Because he drives everywhere he doesn't need a battery-powered laptop, but his computer goes with him on visits to his clients, and he can treat a hotel room as if it were his office.

It allows him to keep track of all his sales leads while he's out on the road. Through its built-in modem he can hook up to the company's mainframe back at head office and get instant and up-to-date information on product availability and delivery schedules – which impresses his clients enormously.

And he can stay on top of the paperwork: the computer's integrated software lets him mix information from his database, spreadsheet and graphics program with word processed documents. When he returns to the office, he can simply print out his monthly reports while his rivals for promotion are still writing theirs. Bad news for them, great news for Mike.

Doug Drybones: The Archaeologist

On his last dig, Doug made use of a small battery-powered laptop which gave him computer power even in the middle of nowhere. Doug didn't need to process the information; instead he was able to record details of site surveys, and to record the location, description and measurements of every ancient artifact found during the excavation.

His needs meant he could dispense with expensive (and heavy) PC-compatibility – important when you're on a limited budget.

All of the data was stored on EPROM cartridges, which don't suffer the high power consumption of hard disk drives, and have no moving parts to be clogged up by the dirt that is so much a part of the archaeologist's professional life.

Later he transferred the data to his desktop PC, where began the important task of analysing the myriad bits of information, and integrating the results ready for publication. So successful was the process that his academic paper spawned the profitable documentary TV series, and the ridiculously lucrative movie starring Harrison Ford.

Sue Yerassov: The Lawyer

Legal eagle Sue found that the price of success was late hours in the office. Unfortunately, leaving work when most people were leaving the pub meant she ran the risk of bumping into one of her many clients – like habitual mugger and pursesnatcher Stanley Nyfe.

Sue solved the problem by buying a laptop PC. Now she can leave the office on time and carry on working at home. And during that dull hour on the 5.15 from Waterloo she's writing what promises to be a bestselling crime thriller starring all of her unsavoury professional acquaintances. After all, a good-for-nothing character like Stanley should be good for something.

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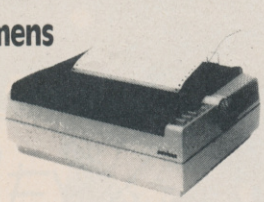

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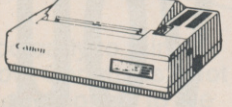

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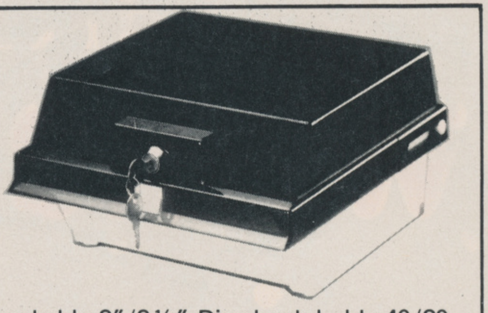

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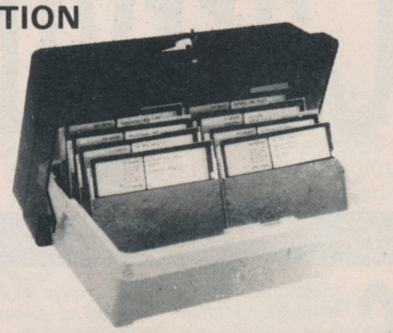

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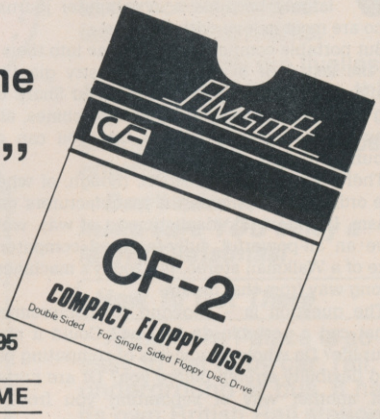

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To help you decide, here are five questions that should point you in the right direction.

1 Do I want to compute on the move?
If the answer is yes then you must have a battery-powered system, and that brings limitations. Although you can run large screens, floppy disks, and even hard disks from batteries, you won't get very much use between recharges.

If the answer is no, you can widen your choice to include machines that require mains power but remain more or less convenient to move around. The Osborne 1 was the pioneer in this respect, and even the Apple Macintosh qualifies, as do most Compaq machines. The key feature is that the monitor is built in to the main unit.

2 Do I want a real computer?
A "real computer" in this sense means a machine that can run software like a word processor, a database, a graphics program. For that you obviously need a full-size keyboard and reasonable display screen.

If all you want is to enter data without processing it, or to have access to data entered earlier, back at the office, for example, you can save a lot of money because you don't need large screens and keyboards. You could use something like a Psion Organiser.

3 Do I want to run my favourite software?
If yes (fussy, aren't you), your choices start to slim right down. You have to realise that in portable computing, there's PC-compatibility and no other standards at all. That means if you're a Macintosh, Amiga, Atari ST or BBC owner, you simply can't run your favourite software on a portable.

If you have a CP/M machine you're just slightly better off because there are CP/M portables, like the Epson PX8. However, these have largely been discontinued, although you can still find them secondhand. You won't be able to run all the software you want, but at least you'll have *WordStar* and one or two other CP/M favourites.

If you have a PC then you've got the widest choice, but there are still limitations. For example, if you're planning on running your standard corporate spreadsheet, you might find you'll run out of memory before it runs on a portable. Or your company's software might be close to unusable on an LCD screen in poor light.

4 Do I really want a full-powered desktop I can take with me?
It's not out of the question, but you'd better be prepared to pay for it. As a rule of thumb, portables will cost you roughly twice as much as an equivalent desktop PC. That's largely because components for portables – low-power processors and memory chips, disk drive controllers, etc, are much more expensive. And the precision engineering needed to cram everything into a tiny space doesn't come cheap either.

5 Do I just want to take work home from the office?
Think carefully about this one: if the answer is yes, you can save a lot of money and inconvenience. Because now you can buy just about any computer you want as long is it will read data from your office PCs. Atari STs, Amigas, Archimedes, Apple IIs, BBC Micros, and Macintoshes all qualify with various bits of add-on hardware and appropriate software.

Note that you don't have to be able to run PC software; all that matters is that your home computer can read and write data in a form the PC can understand. Now the only thing you have to tote around is a floppy disk.

Brave New World

Choosing a portable can be more difficult than choosing a desktop computer, because portability raises some unusual issues and provides some odd solutions. You not only need to understand computers, you need a clear understanding of what your work entails, and how a portable might help.

But once you've made the right choice, portables can bring enormous benefits.

If you're a commuter, the time you spend on trains, tubes and buses can be wasted time; a battery-powered laptop could give you an extra two or three productive hours a day.

If you're a roving worker, constantly moving between offices, visiting clients, staying in hotels, attending conferences, a portable can not only increase productivity, but also allow you to take your office with you. As the old song has it: wherever I hang my AT, that's my home.

If you're often required to work late at the office to clear your workload, a portable could get you home earlier where you can carry on working. Of course, this doesn't equate to more free time, but at least you might see your kids before bedtime.

If most of your work is done in places away from national grid power supplies you really don't have much option but to go batttery-powered.

Portables are a workaholic's dream come true!

I Spy Portables

The Hand-Held Machine

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• Psion Organiser – the most portable of them all

Best known in this category is the Psion Organiser. Battery-powered, and about the size and shape of a Walkman stereo, the Organiser is limited by its LCD screen: just large enough to show a name and address. There's a full alphanumeric keypad, but you need nimble fingers to use it, and you wouldn't want to use it for more than a quick calculation, or to enter the briefest of notes.

Software includes a database, mailing list and stock control program, and a hardware/software pack for connecting the Organiser to any computer with an RS232 interface. There's a black leather shoulder holster for carrying it around, if you're the thick-skinned type who can ignore hoots of derisive laughter.

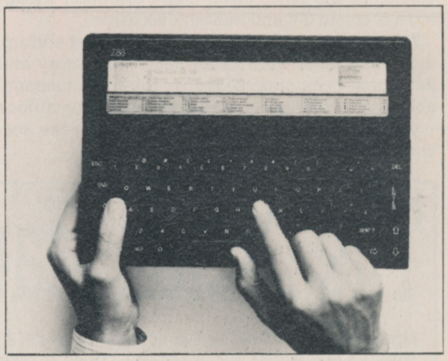
Prices start at around £100 for a model with 8K of RAM, but essential "extras", like more memory and the comms pack, quickly take it over £200. But computers don't come any more portable than this.

The True Laptop

Sir Clive Sinclair's latest, Cambridge Computers' Z88, is the closest to the physical ideal of the portable computer. The size and shape of an A4 notepad, and weighing in at under 2 lbs, the Z88 is convenient, lightweight but eminently usable.

There's a full-size keyboard, and a decent screen giving 8 lines of around 80 characters, depending on the software. It won't run anyone else's software, but the built-in programs are more than good enough for most applications, consisting of word processor, database, spreadsheet, diary, calendar, and BBC Basic for writing your own. An add-on comms package lets you port data to and from most popular desktop machines, including PCs, Amstrad PCWs and Apple Macintoshes.

Prices start at £250, but there are a lot of hidden extras. The mains adaptor, more memory, EPROM cartridges for storage (and an eraser if you hope to re-use them) and one comms package can rack the price up close to £500.



• The Cambridge Z88 – closest to the ideal?

The PC on your Lap

Not surprisingly, the most common laptops are PC-compatibles. Highly desirable, except that prices tended to be very high – until A. Sugar launched one and the cost came tumbling down.

Around £400 will buy the entry-level Amstrad PPC with 512K of RAM, 720K of floppy disk storage, a full-size LCD display, and a full-size (which is to say oversized on a laptop) keyboard. You can run it off batteries, a car cigarette lighter socket, or the monitor from an Amstrad 1512 or 1640.

Naturally you can run any PC software, provided it fits into 512K, and you can opt for the 640K model if memory looks like a problem. Other versions offer a built-in modem.

The PPC really only has two problems: the display is, both literally and figuratively, less than brilliant, and the full-size keyboard means you'll want wide open spaces to use it – you could provoke a riot if you tried it on an average commuter train. But the Amstrads represent unbeatable value for money.

There is an enormous range of alternatives, offering better displays and more compact keyboards, and if you shop around you can find any of the following laptop PC clones at under £1,000: Toshiba T1000, Sharp PC4501, Zenith Supersport, Olivetti M15, Bondwell B8, and Walters PC Portable.

• The Amstrad PPC – great price, shame about the display

The Transportables

Typified by the Compaq Portables and the top-end Toshibas, these machines are essentially desktop PCs, but with LCD or gas plasma displays built in to the main unit, and in a fold-down case that makes for easy transportation.

You can't use them on the move because they won't work from batteries, but are perfect if you need a PC that can be readily moved from location to location (try carting a standard desktop PC, keyboard, monitor and associated cabling across the average office building and you soon see the appeal).

The Luggables

These were the first attempts at portability – the Osbornes and the early Compaqs among others. One oddity was the Commodore SX-64, a luggable version of the much-loved home computer featuring a 5" colour TV and built-in disk drive.

Weighing in at an arm-wrenching 30 lbs and up, these machines were never very satisfactory and have now been superseded by the more manageable transportables. If you're desperate – or curious – you can still pick up some bargains on the secondhand market.

COMPAQ
PORTABLE 386

• The Compaq – hefty, but still transportable

The Dream Machine

Money's no object (well, you've got a spare £5,000 kicking about) and you want the best of the go-anywhere computers. What can you get?

In the transportable department, the ultimate machine must be the Toshiba T5000 machines. The T5100 has a 16MHz 80386 processor (around eight times more powerful than an Amstrad PC), a 40Mb hard disk, up to 4Mb of RAM and a gas plasma display. The T5100's big brother, the 5200, has a superfast 20MHz 386 processor, 100Mb hard disk, up to 8Mb of RAM, and a VGA-compatible gas plasma display with 16 shades of grey (or rather, orange).

Naturally, it takes a lot of power to drive a set-up like that, so Toshiba opted to make the machines mains-only.

If you insist on true portability, on power computing anywhere you want, check out the Zenith Turbosport 386. With Intel's powerhouse processor, 2Mb of RAM, and a 40Mb hard disk, Zenith has still managed to squeeze around four hours of computing out of a battery pack. And you get change out of your £5,000

• The ultimate? 100Mbyte hard disk and VGA graphics – at a price

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VP Planner *plus*

version 2

"I can't really see why anyone would buy Lotus 1-2-3 instead of the cheaper, compatible, more powerful and versatile VP-Planner Plus"

-Amstrad Professional Computing, September 1988

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Comparison of VP-Planner Plus version 2, 1-2-3® rel 2.01 and Quattro®

Features	**VP-Planner +**	**1-2-3**	**Quattro**
Worksheet size	9999x256	8192x256	8192x256
Number of disks/ installation required	2/simple	4/complex	4/simple
2 line and/or pop-up menu control systems	YES	NO	NO
Undo/Redo commands, Entries, macros	YES	NO	NO
Transcript macro files	YES	NO	limited
Background priority recalculation	YES	NO	NO
Fast recalculation	FASTEST	see	below
Add-in toolkit for add-in programs	YES	NO	NO
Text editor	YES	NO	NO
Report generator	YES	NO	NO
Line and box drawing	YES	NO	NO
Data input commands	YES	NO	NO
Multidimensional database files	YES	NO	NO
dBASE file retrieval by field & record	YES	NO	NO
Sideways print	YES	NO	NO
Background print	YES	NO	NO
Autosave	YES	NO	YES
Range-column-width commands	YES	NO	NO
0 width command (hide)	YES	NO	NO
Up to 6 windows on a worksheet	YES	NO	NO
Print graphs from worksheet	YES	NO	limited
Number of user directly executable macros	any	27	any
Macro learn mode	YES	(add-in)	YES
Edit recorded macros	YES	add-in	YES
Macro de-bug (step) mode	YES	YES	YES
Maths/trig functions	23	18	19
Logical functions	9	7	8
Financial functions	11	11	11
Statistical functions	18	14	14
Date/time functions	15	11	12
String functions	17	17	21
Other functions	14	11	15
Total functions	107	89	100
EGA, CGA, Hercules supported	YES	YES	YES
VGA, ATI video support	YES	NO	vga only
Speed trials			
Addition large	0.82	4.00	*
Addition small	0.39	1.00	2.20
Division large	0.82	8.00	*
Division small	0.39	3.00	2.42
Expon large	0.82	58.00	*
Expon small	0.39	19.00	8.68
Multiplty large	0.82	19.00	*
Multiply small	0.39	2.00	2.25

All times in hundredths of a second. Large and small versions of four macro driven worksheets were used: large models contain more than 75 rows and 75 columns; small models contain 75 rows and 25 columns. Tests were conducted on an AT clone at 10MHz and no co-processor. *Quattro could not load large models with 588k free after DOS. Lotus 1-2-3 returns the values accurate to the nearest second only. *VP Planner Plus* runs on IBM PCs and compatibles with 384k or more RAM

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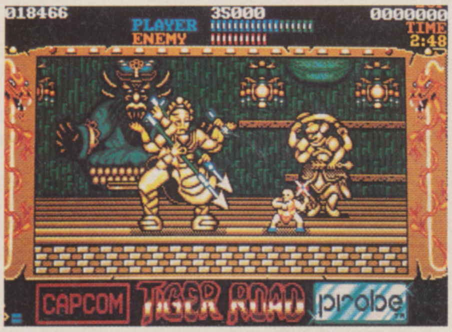
Just Raring To Go...

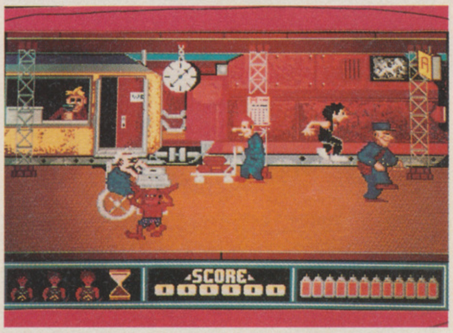
***ANDY STORER** looks at six new contenders for the Christmas pole-position*



• You're the little guy ... looks like you're up against BIG trouble

TIGER ROAD US GOLD

Although we've brought you a review of the C64 version on page 31 this week, we liked the graphics so much on the ST version we thought it worth including a screenshot. As you probably missed it in the arcades, let's just say you're up against a bunch of nutter Ninjas in level after level of martial arts mayhem.



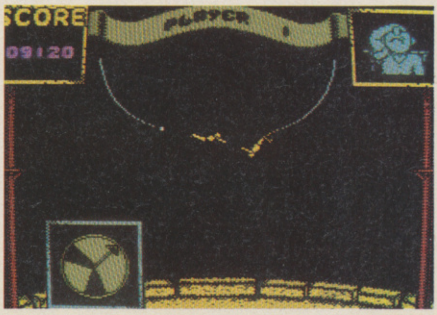
• The art of subway riding on the Amiga

GRAFITTI MAN SOFT GOLD

Get a hold of your spray cans, crank up the Rap and get painting in a comic-style quest to become a member of a famous grafitti gang. Problem is, though, there's a whole bunch of people out to prevent you painting up the eight locations on hand and at the end of each level you have to copy the artwork you're presented with. The computer judges your results and if you're a budding subway surrealist it's onto the next. Why was Art at school never like this!

CIRCUS CIRCUS MARTECH

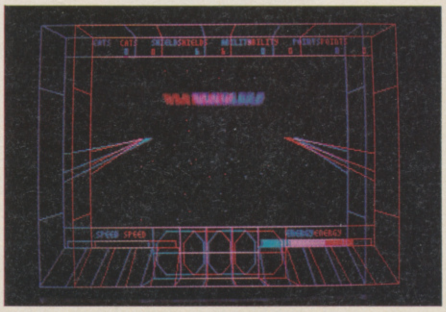
Martech's Big Top sim combines six circus events to present you with the chance of becoming Master of the ring and its acts. So, roll up, roll up, for taming wild lions, throwing knives, high-diving, tight-rope walking, the high trapeze and last, but by no means least, whizzing through the air as a human cannonball. As Tynesoft's *Circus Games* and Go!'s *Circus Attractions* are also due out shortly, you won't have any chance to clown around any longer.



• Fly through the air with greatest of ease on your Spectrum

WANDERER ELITE

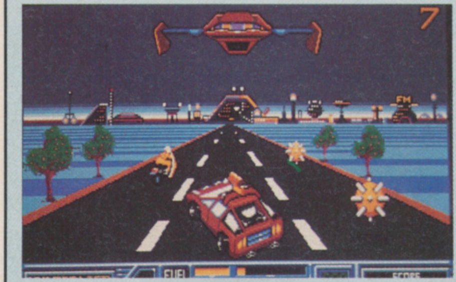
This French import for the ST first saw the light on the QL nearly two years ago, where it proved, too late of course, that the Quantum Leap did have games potential. *Wanderer* is worthy of note for its overlapping blue and red wire-frame graphics, which combine to produce optical 3D when viewed with the accompanying spectacles. The gameplay involves zooming all over the galaxy firing at and fleeing from a range of spacecraft out to prevent you delivering playing cards – yes playing cards – to planets in the middle of a poker game.



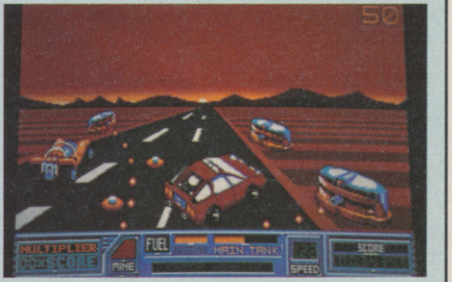
• No you're not drunk – you just need glasses

Road wars go 16-bit

U.S. Gold puts it foot down to overtake Overlander ... Titus think it's all crazy



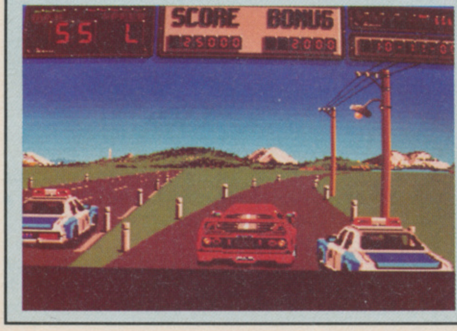
• Extra weapon time – thank heavens...



• Motorway madness takes on a whole new meaning

ROADBLASTERS US GOLD

The midsummer roadwars between Elite and U. S. Gold over the similarities between *Overlander* and *Roadblasters* accelerated right into the court rooms and as far we know they're still there. Two great games for the lawyers among you to check out. But here's the ST version of the Atari arcade game that caused the rumpus and it looks to have been worth the wait. *Fire and Forget* from Titus also burns up the same bit of road, so there's a number of choices open to pedal-to-the-metal merchants. You don't need to overtake as take out your opponents...



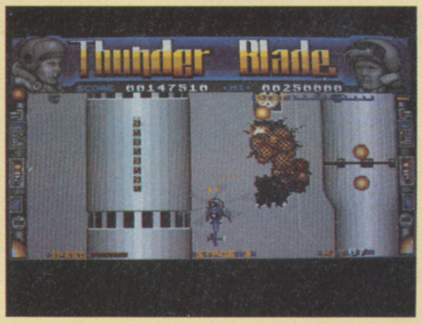
CRAZY CARS 2 TITUS

We all had a laugh last week when a rival mag published screenshots from *CC2* with captions billing them as *Outrun Europa* exclusives – that's the same mag that boasts sales of 60000 when it's less than half that – so there's no wonder. *Crazy Cars 2* looks like a great follow-up to its predecessor, which bombed as far as most reviews were concerned. You're hitting the tarmac with the same kind of racing game but the animated graphics are in a different league altogether. This time you also get to crash quite frequently as well instead of merely bouncing around and carrying on

• No it's not Outrun Europa on the ST!

This week's sneak-a-peek...

Still wet from the developing tanks is the first screen shot of *Thunderblade* on the Amiga – we've seen a near-complete version and it looks great, shooting even the ST's great graphics firmly down to Earth. It's further proof that the gap between Amigas and arcades is closing all the time and we'll be there with the full review just as soon as we're allowed to print it. Catch our review of ST *Afterburner* elsewhere to check out its closest rival.



Welcome to the New Computer Express games section, the liveliest, most up-to-the-minute reviews for miles. You'll notice that our reviews are laid out differently from run-of-the-mill computer mags. We:

- use a simple, no-holds barred, no-fuss star rating system, where only the very best games get the coveted five-star rating.
- break up reviews into easily-digested sections relating to scenario, gameplay, graphics etc. – no more hunting to find out what you want to know.
- take version differences seriously. You'll always know what machine the game's being reviewed on, but we'll give you information about other versions too.
- give games of particular significance their own box, together with a flash to say what's different about them.

FLYING SHARK

FIREBIRD

ST • £24.99dk
Also on Spec, C64, CPC

Firebird's latest on the ST is another release in the long-line of vertically scrolling shoot'em-ups – so why bother buying this particular incarnation?

● GAMEPLAY

You'd think flying a biplane would be boring by today's standards, but believe us, if only it was!

As you and your biplane glide through some very attractive – but extremely hostile – territory, you'll meet all manner of enemy forces just waiting to give you a hard time.

Tanks, biplanes and anti-aircraft guns are just the beginning of your troubles, because in later levels you'll encounter massive aircraft carriers and secret supply depots – all of which have to be destroyed with lightning response, otherwise you'll kiss another life goodbye.

Fortunately, if things start to get too tough, help can be found in the form of smart bombs, extra fire-power and extra lives – all there for the taking.

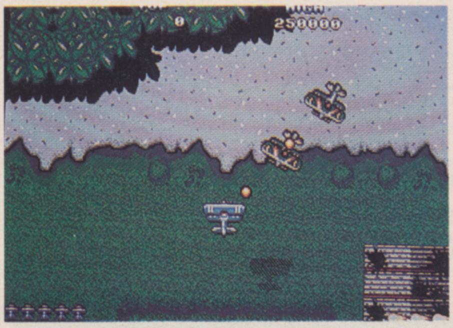
● GRAPHICS AND SOUND

The backdrops are stunning, with some very colourful and well-defined objects – and are complemented by equally distinguished sprites.

Audio comprises of soundtrack and spot-effects which are not exceptional but do produce a pleasing background to the on-screen action.

● OTHER VERSIONS

The 8-bit versions were released late last year, and are now available on a Compilation tape from Ocean called *Taito Coin-Op Hits* – along with *Arkanoid I and II*, *Renegade*, *Bubble Bobble*, *Rastan*, *Slap Fight* and *Legend Of Kage* – all for around £13.



• Wallop those Fokkers – it's them or you

● EXPRESS VERDICT

Flying Shark produces a praiseworthy pot-pourri of predatory proceedings (You're fired – Ed). Visuals are impressive, audio is great and gameplay is fun – but you're left with a feeling of deja-vu as you shoot 'yer way through yet another vertically shoot'em-up on the ST.

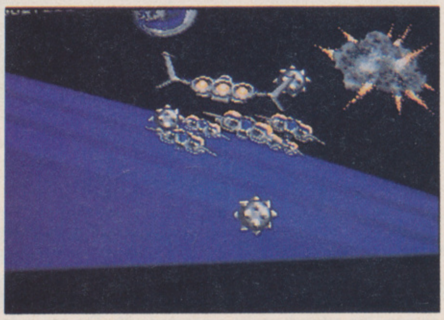
✪ ✪ ✪ ✪

Rik Haynes

GALACTIC CONQUEROR

TITUS

Amiga • £24.99dk
Also on ST, PC
Due out on CPC, C64, Spec, MSX



• Shooting your way through sprites shifting at pluslight speeds

This 3D arcade-action blaster from French company Titus is one of only a handful of shoot-em-ups to appear first on the Amiga. In combining fast action with strategy, *Conqueror* also attempts to deliver lasting gameplay. Does it succeed or is it just another spacey shoot out?

● GAMEPLAY

Your job is to protect the planet Gallion with your starfighter, Thunder Cloud II, as a large rebel force progressively invade the galaxy. From a star-map you select your destination and – hey presto – there you are in the thick of things up against mines, probe-robots, missiles, meteorites and, of course, enemy ships of all shapes and sizes. On each planet you'll encounter three types of combat – ground, aerial and space fights all requiring heavy use of the fire button.

Rid a planet of rebels and it's back to the map to decide where to go next to prevent their strategic spread – here the game adopts a tactical war game scenario. But the rest is pure, undiluted blasting. Thankfully, you enjoy unlimited lives, since the game only ends when Gallion is invaded – so it's great to have nothing to worry about but the body count.

● GRAPHICS AND SOUND

Galactic Conqueror is visually very impressive, with 3D opponents moving both smoothly and swiftly towards you with ease. This scaling is the major highlight of the game, and proves the programmers know how to shift a sprite or two. Audio is less convincing – the digitised speech accompanying exploding spacecraft would be better if it were louder and more varied.

● OTHER VERSIONS

Available now for Amiga, ST and PC, *Galactic Conqueror*'s also due out on CPC, Spectrum, C64 and MSX. We haven't had chance to see the ST or PC versions yet so it's a bit iffy as to whether they'll duplicate the Amiga's sexy scaling.

● EXPRESS VERDICT

A great outing as far as intergalactic blast-em-ups are concerned. We particularly like the lack of interruption in gameplay – you can boot up and shoot up forever. Whether you'll find time to work your way through all 416 planets in one sitting is another quesion entirely.

✪ ✪ ✪

Andy Storer

TIGER ROAD

US GOLD

C64 • £9.99cs, £14.99dk
Also on Spec, CPC
Out soon on ST, Amiga

US Gold *Tiger Road* conversion marks yet another hack-and-scroll'em-up from Capcom, the arcade masters of the genre.

● GAMEPLAY

You take the role of Lee Wong, a teacher's pet of the highest order, whose task for the day is to rid the land of the evil Ryn Ken Oh, who has been raiding your village and generally been making a nuisance of himself.

Luckily, you'll have the help of a magical jacket which enables you to fly and use any magical weapons that come your way.

On your travels through this multi-load/level, horizontally and sometimes vertically-scrolling adventure, you'll encounter all of Oh's little minions, like axe-wielding Samurai Warriors, flying Ninjas and acrobatic Sumo Wrestlers – before your final confrontation with the Oh'er himself…

● GRAPHICS AND SOUND

Tiger Road manages to perform quite well visually, with a varied selection of adequately designed sprites and backdrops – although most of the sprites are too small.

Audio is far less satisfactory, with barely functionary soundtrack and sound-effects.

● OTHER VERSIONS

The only other version available for review was the Spectrum's – which unfortunately did not load! The ST and Amiga versions are looking very good (check out page 27 for a preview).

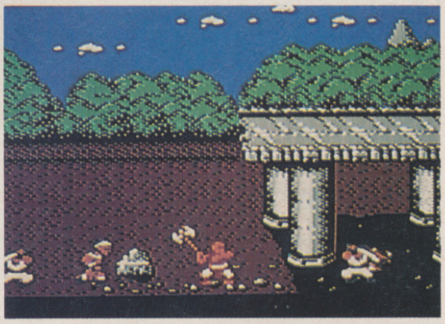
● EXPRESS VERDICT

Tiger Road is on the whole a competent game – we are unable to judge the closeness to its parent, because it's one of those Capcom titles that must of appeared in only 5% of the arcades around the country!

The problem lies in the fact that it provides nothing new or radically exciting. The gameplay is very limited, but there's a strange compulsion to see the next screen – and fortunately there's plenty of them.

✪ ✪ ✪

Rik Haynes



• An axe-wielding homicidal maniac

AIRBORNE RANGER

MICROPROSE

PC • £24.95dk
Also on C64, Spec
Due out soon on ST

You drop behind enemy lines as an elite commando type in this combat game from Microprose, with a whole host of different objectives to tackle.

● VERSION UPDATE

There are plenty of scrolling massacre-em-ups about these days, but *Airborne Ranger* offers something a little different, in that you can move about in any direction,

☞

GALDREGON'S DOMAIN

PANDORA

Amiga • £19.99dk
Due out soon on ST
Scheduled for Spec, CPC, C64

5 GAME

***Galdregon's* is an interactive role-play sim in the vein of *Dungeon Master* – it features similar aims, methods, locations and objects – but differs in so far as in this one you're strictly on your own – there's no bunch of varyingly gifted and skillful colleagues to help you out of a tight corner.**

So, as there are plenty of tight corners, you might expect it to be a lot more difficult. And as it took four people nine months to produce you might be right.

● GAMEPLAY

You've been chosen to battle against the wizard Azazael – a resurrected occultist of the evil variety who's searching the Lands Of Mezron for the five gems of Zator. Your aim is to locate the gems first and thereby equip yourself with extra powers.

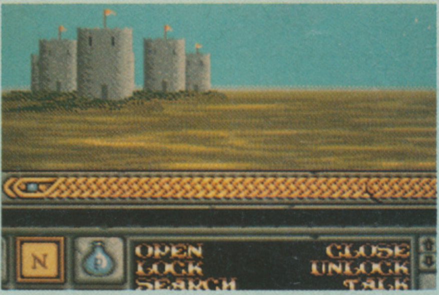
Simple enough, except they're somewhere among 2000 locations, and when you consider a castle or a dungeon is just one of these and it alone may feature up to 250 locations then you've really got your work cut out.

When all five are brought together – well you're well on the way to becoming one helluva guy. As you're already deemed to be unequalled in combat skills by your contemporaries, you might think taking the gems from the five powerful creatures who guard them will be a piece of cake. Think again. You're going to need all your stealth and cunning to defeat them.

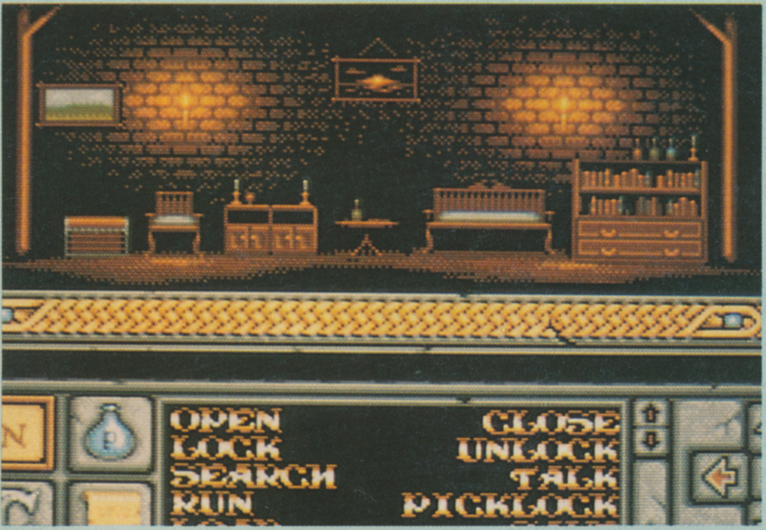
It's best to visit inns and settlements and get some inside knowledge of who you're actually up against. There are several hundred characters with which to interact and only a few of them are friendly. All are semi-intelligent beings quite capable of turning the tables on you thank you, so watch out.

Besides equipping yourself with info there's also a lot of handy weapons and magical objects to find – two-handed swords, daggers, wands and cloaks among them. It's best to find yourself some clothing first though – and the kind of gear you'll look best in is the functional sort – armour, shields and chain-mail.

Commands are effected by mouse control – various sub-screens depict choices and options available to you. Actions such as closing, opening, locking and unlocking the many entrances and exits you come across are all activated by icons. There's a full range of the usual commands you find in text-based adventures including an inventory screen to show what weapons and objects you're carrying. Speech with other characters, the casting of spells and choice and use of weapon is also conducted in the same way. Movement is achieved by either mouse or joystick.



• There are 250 rooms in this castle location – just one of many



• This rich detail is typical of the care and attention paid to the graphics

● GRAPHICS AND SOUND

Galdregon's main-screen graphics consist of fast-updating, well-detailed locations with large, overlaid character sprites. A great deal of attention has been paid to evoking atmosphere in every situation – from castles and labyrinths to forests, plains, caves, temples and inns.

Each major location has a completely original design motif – there's none of the grey-wall monotony of *Dungeon Master* – and what's more there are 32 colours on screen at any one time, so you're looking at a tour-de-force of textures. You're left wondering how so much detail and scale can have been incorporated into one package.

Sound is comprehensive too. There's 90K of studio-mastered, digitised FX covering location ambience, combat action and movement along with a further 90K of music. Digitised speech was also to be included but has now been left over to be included in – yep – *Galdregon's Domain 2*!

● OTHER VERSIONS

Galdregon's due out next on the ST, where graphics should be of the same high quality but sound effects a little less clear due to the Amiga's better sound chip. It's also due out on Spectrum, Amstrad and C64.

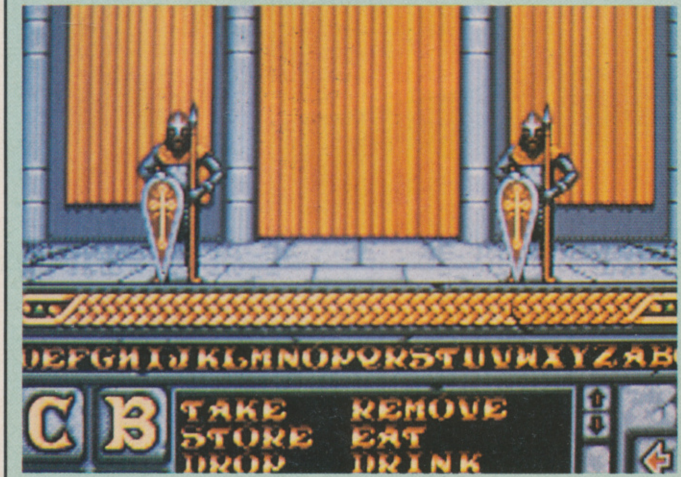
● EXPRESS VERDICT

Every now and again you come across a game you just know is going to be a biggie, and in this case you have *Dungeon Master*'s sales record to go on. *Galdregon's* is virtually the same territory, but comprises better graphics, sound and a gameplay that is every bit as compulsive and more.

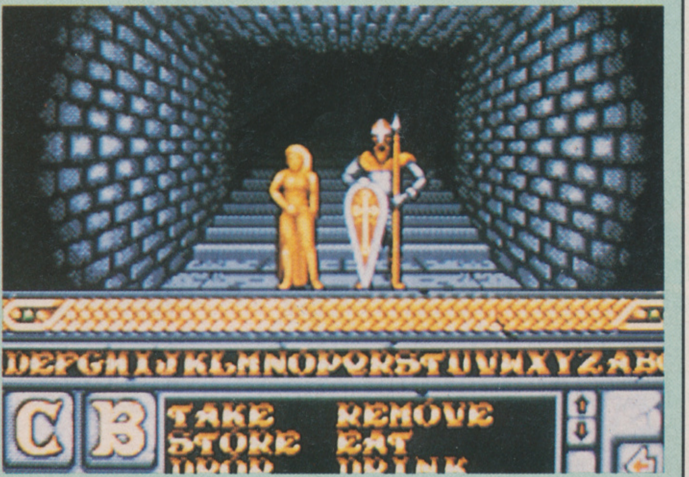
With this range of locations and atmospheres at hand you could be in Galgregon's Domain for a long, long time and so you're talking value for money to the nth degree.

✪✪✪✪✪

Andy Storer



• A couple of knights look as though they could make your next step your last



• This damsel's certainly in distress – she must be freezing

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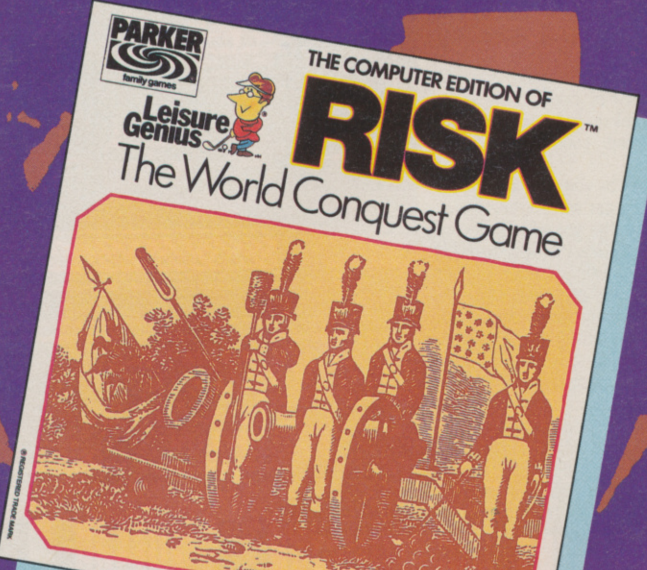

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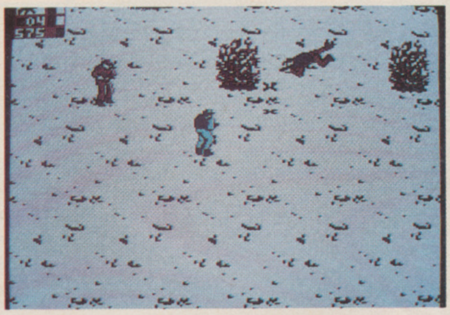


• You're the blue one and you're fighting the reds (Hang on, is this getting political?)

choosing your own route across the territory as you move towards your objective – be it freeing hostages or annihilating enemy bases.

In addition, there is a short section before each mission where you can choose your supply drop points as you control an aircraft flying over the combat zone. Then you guide your parachute as you glide to the earth, hopefully steering clear of enemy hotspots. Once on the ground you can use a variety of weapons, run, crouch, and even crawl as you take on the enemy.

Airborne Ranger first appeared on the C64 a year ago, and has taken until now to make it onto any other machines. The graphics on CGA machines are quite good considering the limitations of just four colours – animation and detail being good.

Sound, though – well, let's just say they've made an effort. The effects, including the sound of the aircraft's engines and, later, gunfire, are quite good considering – but to incoporate 'tunes' as well was optimistic to say the least, bearing in mind the PC's sound limitations.

The PC version of the game is the weakest, while the ST version should be worth looking forward to.

✪ ✪ ✪

Rod Lawton

AFTERBURNER

ACTIVISION

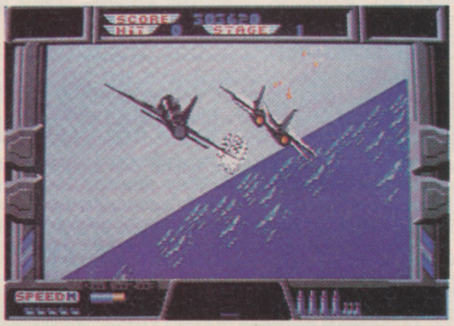
ST • £19.99dk
Also on C64, Spec
Due out on CPC, PC, MSX

Last week we were first off the runway with our review of the Spectrum version of this fave arcade conversion and now we've taken hold of its almost complete ST counterpart.

With coding by The Argonauts of *Starglider 2* fame you'd expect *Afterburner* to clear the skies of most competition, wouldn't you? Of course you would.

● GAMEPLAY

Your F-14 Thunder Cat fighter zooms up on auto from it's carrier base to commence a seemingly endless aerial attack as you try to total everything that even attempts to enter your field of vision. While your 20 mm cannon continually fires unlimited salvos, you're hitting fire for missiles to take out any enemy craft that aren't immediately in front of you. A window beneath the main display registers you're locked-on, and the target is trashed as the missile finds it way home. Every few levels you're rearmed and refuelled in mid-air or on landing strips, and then it's onto the next pitch and roll for more continual combat.



• Shake, Rattle and Roll! – or battle through the shaky scroll

● GRAPHICS AND SOUND

By 8-bit standards, the graphics are of course better – but not by that much. We're not talking serious definition here, nor superlative response from the joystick or mouse – achieving a 360 roll seems almost arbitrary. The aerial opposition emerge as specks on the horizon and all too easily disappear behind you in a blurred rush. The ground beneath you bears only a passing resemblance to landscape – the absence of detail being most apparent in the night sequences. Sound effects consist of a backing music track interspersed with digitised warning speech and the intermittent crashes of exploding aircraft.

● OTHER VERSIONS

The Spectrum and C64 versions are worth checking out, since they make full use of their machines' graphics capabilites. We can only wait to see what the Amiga version will look like – in the meantime there's CPC, PC and MSX versions due.

● EXPRESS VERDICT

We're disappointed by the technical quality of this conversion. When you compare it to a good conversion from coin-op to ST – say Elite's *Space Harrier* – it look as though *Afterburner* is only half complete. There's so much of the original's detail missing you might imagine this has been a rush-job to hit the streets for Xmas. A great pity.

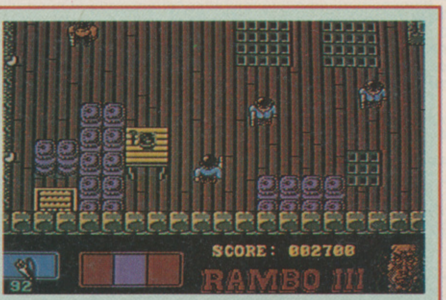
✪ ✪

Andy Storer

RAMBO III

OCEAN

C64 • £9.95cs, £14.95dk
Also on Spec, CPC
Out soon on ST, Amiga



• Level 1, and Rambo's just stepped into a whole heap of trouble

Ocean now gives you the chance to take the persona of that infamous commie-bashing Neanderthal, Rambo – hoping that computer *Rambo III* will be more successful than its film parent was earlier this year.

Your mission consists of rescuing your long-time friend and colleague, Colonel Trautman, from the evil clutches of the Soviet Union. On your assignment you'll battle through three separate multi-load sections in a bid to singlehandedly wipe out the Russian contingent in Afghanistan.

AAARGH!
MEDIOCRE

● GAMEPLAY

Section one places you in a Russian fort, searching for the old Traut, who is held captive somewhere within its walls. On your travels you'll encounter loads 'a' Ruskies – presenting you with a simple choice (Rambo can't handle anything else) – either wipe'em out or ignore these hateful creatures of sub-human substance. It's lucky you've got such a large variety of weaponry to choose from: knife, arrows, explosive arrows, pistol and machine gun – after all you might get bored otherwise. You'll also discover various objects lying around which can be picked up and used to help (or hinder) your further progress.

Once you've found Trauty, you must escape from the fort by priming strategically placed bombs, before making your getaway in a thoughtfully provided Russian helicopter.

In the last section, you'll have the chance to mow down your Russian opposition by using one of their own tanks (a case of irony too complicated for Rambo's feeble mental capacities) – as you make your way to the safety of the Afghanistan border. Unfortunately, the Ruskies are pretty mad with you by this time, and throw everything they have at you in a last-ditch attempt to take out Reagan's pin-up boy. Don't forget it's not that simple driving a tank these days, so you'll have to keep an eye on the damage and gun heat indicators if you want the chance to star in *Rambo IV*.

The first two sections place you in a familiar *Gauntlet* type environment, in fact it's not a million miles away from Pandora's *Into the Eagles Nest* – using a flip-screen, slightly overhead view of the proceedings.

The final section is much more interesting with the action taking place in a head-on *Operational Wolf*-type way.

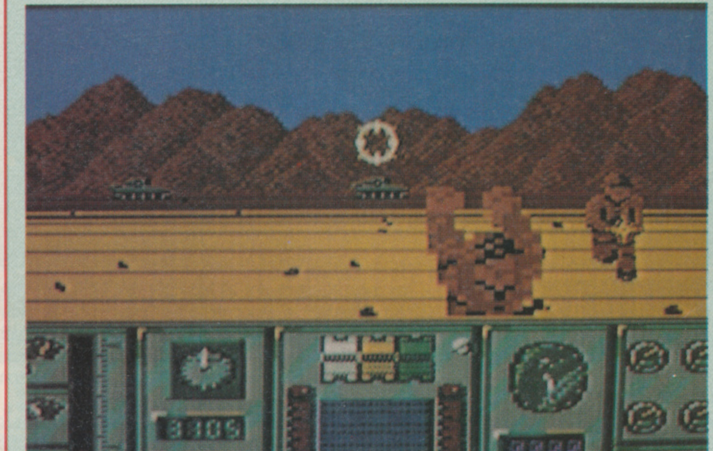
● GRAPHICS AND SOUND

Average is the word that best encapsulates the audiovisuals of the game. While they are not that bad, they only perform their assigned tasks in a rudimentary and functionary way.

The only innovative visual touch is the way your energy depletion rate is represented on-screen by a caricature of Rambo's ugly-mug turning into a ghostly skull.

● OTHER VERSIONS

The Spectrum and Amstrad CPC versions should be out by the time you read this, with ST and Amiga versions to follow soon afterwards. Don't expect any big improvement in the gameplay though.



● EXPRESS VERDICT

Even if you can ignore the pathetic American gung-ho mentality, average audio-visuals, and boring (but relatively long-lasting) gameplay – you'll still think the incredibly awful film to be reasonable in comparison. Ocean has done the best you could expect with a bad licence, but *Rambo III* just does not deliver the goods.

✪ ✪

Rik Haynes

ECHELON

US GOLD

PC • £19.99dk
Already on C64
Due out on Spec, CPC

Touted as a "true simulator" (of a craft which doesn't exist?) *Echelon* promises a tough and long game task, with a mixture of action, strategy and exploration.

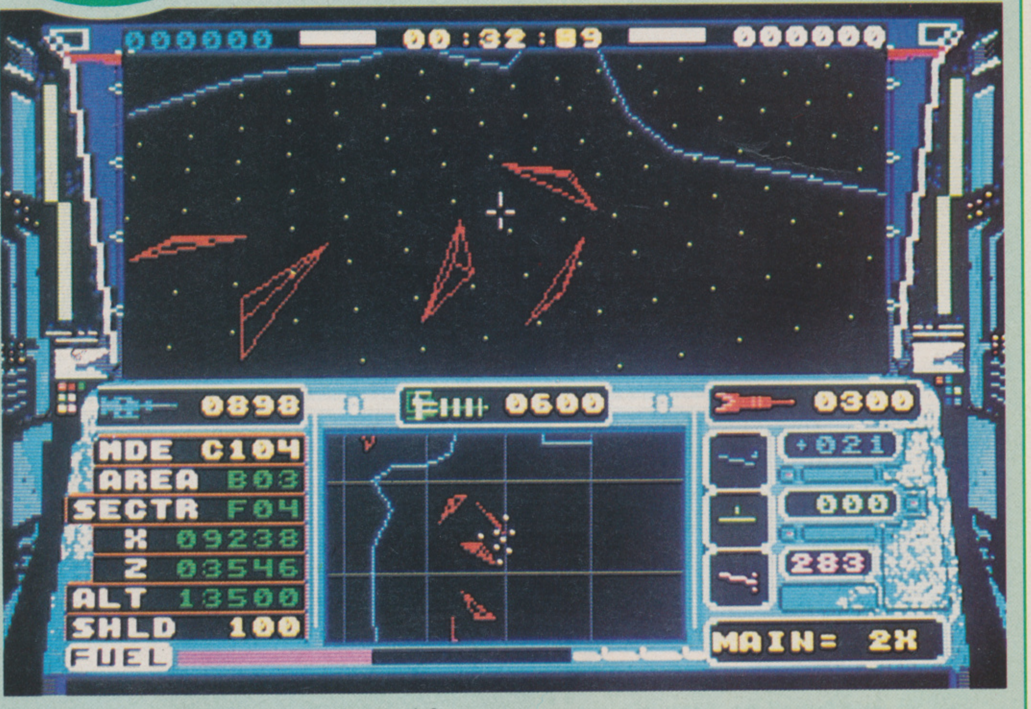
You're flying a C-104 Light Cruiser (codenamed Tomahawk) in this 21st century blast, and it's your job to contain the pirates that are threatening shipping in the space lanes around Isis (the newly-discovered tenth planet).

● GAMEPLAY

More than a hint of *Starglider 2* here, as you have to combine exploration and puzzle solving with a fair dose of good old arcade action. You patrol a zone 840 kilometres square that contains a variety of interesting objects and locations. Your ultimate aim in all this is to learn the location of the pirate base once and for all, and there are clues down on the planet surface to help you. A map is provided with the game, but only nine of the 36 areas have any detail. It's up to you to explore and map the remainder.

While you're doing that, there's plenty else to be getting on with too. Fly your C-104 is a complex enough task, with a daunting keyboard reference card to keep by your machine. You can practice your flying with three different training courses located on the planet surface (check the map) and also practice deploying and flying your RPV (droid).

If you want to concentrate simply on the exploration aspect, you can switch off the bad guys altogether. Alternatively, you can choose to spice up the gameplay with sporadic or continuous combat with the pirates. Chances are, once you've got to grips with control of your Tomahawk, you'll fancy mixing it a bit.



• EGA – What have we got here? Evidence of the pirates maybe?

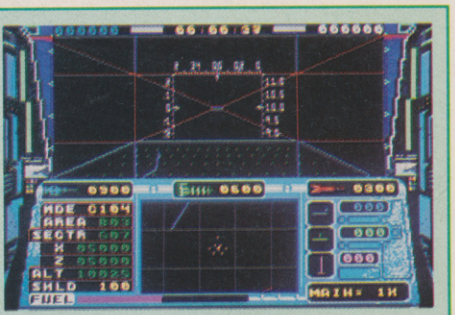
● GRAPHICS AND SOUND

As *Echelon* loads it's cockpit surround first impressions are good. You have clearly depicted displays and gauges indicating data on velocity, position, altitude, shield level, fuel, RPVs, pitch, bank and heading. At bottom centre of screen you have a radar map of your current sector and its contents. The main screen area loads in a second later presenting you with a wireframe view of you immediate surroundings. So far so good. You hit the accelerator and, hey presto, better get yourself a pillow. You could fossilise while waiting for the screen updates on this one. What's more the main screen looks distinctly CGA colour-wise while your brain attempts to piece together the dots that are meant to signify objects and detail. Okay, so Echelon's been out in the States for well over a year now but even then it looks at least three years old.

● OTHER VERSIONS

Out on the 64 for several months – when, if you were lucky enough to live in the States, it came replete with a Lipstick (a voice-activated fire-button) – *Echelon* suffered from slow screen updates.

DETAILED GAMEPLAY!



• EGA – That's your view as you prepare for launching

● EXPRESS VERDICT

Echelon scores on game content and scale, but pales slightly when it comes to graphics (and sound, on the PC). Just as well, then, there's more to it than sheer arcade razzamatazz.

✪✪✪✪

Andy Storer

4 SOCCER SIMULATORS

CODEMASTERS

CPC • £9.99cs, £12.99dk
Also on Spec
Out soon on C64, ST, Amiga, PC

With the football season in full swing (Spurs, what are you playing at? It certainly isn't football!), software companies were bound to release plenty of football games.

Codemasters has kicked-off with *4 Soccer Simulators*, the first game to be released on its new full-price label – but is it worth the extra asking price?

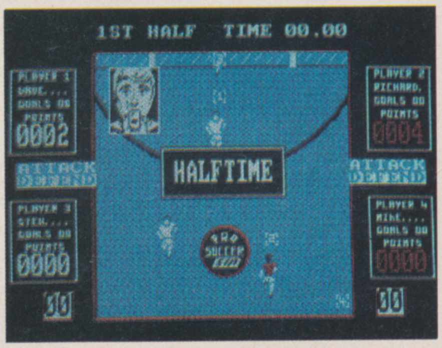
● GAMEPLAY

4 Soccer comprises 4 separate games: 11-a-side soccer, indoor soccer, street soccer and soccer skills – all tied togther by the basic theme of football. 11-a-side soccer is the full featured game, indoor soccer is played in an enclosed area and street soccer is played in a street with cars, fences and out-of-bounds gardens. Soccer skills is a training section including ball control, goalkeeping, penalty taking, sprint training, press-ups, weight lifts, situps and bar lifts.

The soccer games are all basically the same, the only difference being in minor details of play, such as allowing/disallowing throw-ins, goalkicks or corners – which may sound substantial, but you don't notice because you're so frustrated by the awkward and slow player controls.

Each game is played on a severely reduced play area in the centre of the screen – using a slightly overhead view of the action. In play they offer nothing new to the already available soccer games.

Soccer skills consists of several joystick-waggling events – which are so boring you should be awarded extra points for just staying awake – and is obviously tacked on to build up the number of games supplied.



• Even Commodore wouldn't sponsor this one!

● GRAPHICS AND SOUND

The CPC can produce some brilliant colour displays – its a pity Codemasters didn't use any of them when they wrote this game – the colour schemes used are dull and boring. Definition and animation of the players is the only adequate visual aspect.

Sound-effects are almost non-existent and those that appear aren't worth the effort – and are accompanied by a chronic and out of place soundtrack on the title page.

● OTHER VERSIONS

4 Soccer is just as dire on the Spectrum – only with even fewer colours.

● EXPRESS VERDICT

Codemasters used to produce some very audio-visually appealing, slightly unplayable, but very affordable games. Unfortunately *4 Soccer* is another example of the demise of this formula – offering a full-priced selection of totally unplayable soccer games complemented by a boring and superfluous training section. *Match Day II* by Ocean is a far superior football game – and it's cheaper too!

The Darling brothers should spend less time promoting themselves, and start to concentrate on producing original and exciting games titles.

✪

Rik Haynes

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What's a computer for?

The functions of the micro can be many and varied...

A fair question often posed by people who haven't yet bought a computer is: What am I going to do with it?

The things you can do with a computer fall into two categories: work and play, and many computers are equally good at both. (Although a lot of people like to think you can't mix business and pleasure, with any of today's computers you can, and very easily too.)

But because some computers are better at some tasks than others, it helps to have an idea of possible uses before you hand over the plastic.

The play's the thing

Fact: most computer owners spend most of their time playing games. Some observers will tell you that this is because computers are nothing but toys, but the truth is that it's because most of us like to play.

And if you believe all computer games are of the *Space Invaders* type, then you don't know the half of it. True, most games do involve manic on-screen battles, usually involving aliens, and almost always having a kill-or-be-killed scenario. They're designed to appeal to the child in all of us – they're fast, loud, colourful, exciting ... and they can be massively addictive.

But there is a second group of games that require a much more thoughtful approach. This group was commonly called "adventure" – after the title of the first game of the type – and originally made far greater use of text than of pictures. The player is usually invited to control a computerised character in undertaking a quest, or solving a series of puzzles. Such games have been called interactive fiction because they can be like reading a book in which you can also influence the outcome of the story.

• You can now do even more with a computer, and faster and cheaper into the bargain.

More recently, the emphasis has changed so that players are now more closely identified with the leading character, assuming an electronic alter ego for the duration of the games. For this reason, the genre is becoming widely known by the title of role-playing games, or RPGs.

A third category of computer gaming covers simulations. Here the computer attempts to model a real-world situation, and then puts you in charge. Some of the best are flight simulators, which allow you to control anything from a small private plane, to a helicopter gunship, to a passenger-carrying jumbo jet. But there are others: command a submarine or a battleship, pilot the space shuttle, occupy the hot seat in an air-traffic control tower, drive a Formula 1 grand prix car, run a small company or a large country, or manage a football team.

The best simulations are incredibly realistic, and most are informative and educational while being entertaining.

Finally, there are the computerised versions of "real" games, for want of a better phrase. There's everything here from chess to football, from bridge to golf, even mountain-climbing.

Of course there's a lot of rubbish among computer games, but as Theodore Sturgeon once said, 90 per cent of everything is crap – books, TV, cinema, pop music, government. But computer gamers get their share of the good stuff.

Give me the word

Perhaps the most common use for computers after gaming is for writing, purely because it's one of the things most of us do anyway. Students write essays, business people write reports, teachers write course notes, club members write articles for newsletters, and everyone writes letters – letters to the bank manager, to Mum, to the newspapers, to your MP.

A computer can offer a great deal to writers. Provided you can find your way around a keyboard, it can be physically easier to get words on paper, and it can be much quicker. The computer can check your spelling, and other mistakes can be corrected quickly and easily without bottles of Tipp-Ex or re-typing whole pages.

So the end result is a pristine page, without mistakes, neatly formatted, a thing of beauty.

Obviously you have to do a lot of writing to get the most out of word processing. You'd be foolish to spend £300 or more simply to produce one or two nice letters a year. But if you've bought a computer (for whatever reason), word processing is another return on your investment.

Data daze

Databases: thanks to a million cop shows and spy thrillers, this is the one that most computer novices think of when they picture computers working. Just feed the electronic brain with a couple of random bits of information, and back comes a list of appropriate names and addresses.

Unfortunately for the ordinary user, you can't buy lists of useful information for your computer to process. What you can buy – and lots of them – are programs to sort the data into meaningful order, and then to give you that information in a form that's useful to you. But you have the laborious task of typing all that information into the machine in the first place.

So while it's possible to type in the relevant details of all your favourite restaurants, or your record collection, or your library of books, the physical labour involved is off-putting, to say the least.

But if you do have a lot of information that needs to be managed properly – reference notes for your degree thesis, for example; or the membership list for the Snogging-on-the-Green Lonely Hearts Club – the computer is a great helper.

By the numbers

There is one application for computers that would be close to impossible without them: spreadsheets. A spreadsheet is an electronic grid of thousands of boxes, and each box can contain a number, a label, or a mathematical formula. Furthermore, each box can be cross-referenced to other boxes.

All the hard work of calculating all these formulae is left to the computer, which performs the maths almost instantaneously.

But the clever part is that when you change one number, all the myriad effects of that change can be seen instantly. This makes spreadsheets very useful for businesses because it allows you to calculate the effects of small changes in your finances: what happens if you put prices up by 10 per cent? What happens if your rates rise by 12 per

☞

What not to do

Although you can make a computer do almost anything, there are certain applications that simply aren't worth bothering with.

For example, there is the classic "balancing the bank account". Forget it. If you can't keep track of your money with the aid of your cheque stubs and a pocket calculator, a computer isn't going to help.

There's also the problem of fitting the computer into your everyday routine. If you foresee a use for the computer more or less constantly through the day – if you're using it in a business environment, for example – it's perfectly feasible and sensible to have a computerised address book at your fingertips.

It doesn't make sense to try the same thing at home. You'd be far better off with a Filofax than in going through the power on/load software/run software/power off routine every time you need a phone number.

Remember: computers can do almost anything, but it's up to you to decide whether it's worth doing or not.

cent? And so on.

The spreadsheet also allows such complex mathematical images to be created that the application is often called financial modelling. You can create a numerical model of anything from a corner shop business, to the national economy.

However, spreadsheets work for any mathematical system – not just money. So an engineer could calculate the effects of stress on a material; or a biologist could model the effects of pollution on animal populations; or a model aircraft maker could try various wing shapes and see the effect on lift, drag and other areas of flight performance.

Provided you're comfortable with mathematics, a spreadsheet can be put to use almost anywhere.

Sound and vision

Computers aren't just good for "worthy but dull" stuff like facts and figures, they can be put to work in the arts too.

Even if your artistic talents seem to have fossilised at the level of nursery school finger-painting, your computer can help you get a little further along the road.

Graphics programs allow you to treat your monitor as a painter's canvas or sketchpad, or an architect's drawing board. Even with quite basic software, you can always draw a straight line, or a perfect circle. And with more advanced programs you can create impressive three-dimensional drawings. When you make mistakes, you don't have to start over and waste hours of work. Just erase the offending lines and try again.

Need to know?

Any particular concepts or bits of jargon you don't understand? Anything you always wanted to know but were too embarrassed to ask? Why not write to: First Timers, New Computer Express, 4 Queen Street, Bath, BA1 1EJ. We can't get into private correspondence unfortunately, but the best questions will get answered on these pages. No question too dumb, no subject too simple, and no condescending replies. Guaranteed!

In music, your computer will help you make the most of your talents – or even hide the fact that you have the musical talent of a tone-deaf donkey. Your computer can teach you to read music, or to make music without understanding an ounce of theory.

And if you are a genuine musician, you can use your computer to compose songs, and to drive banks of synthesizers, drum machines, sequencers, and a veritable orchestra of other instruments.

Program power

Here's one that a lot of people don't think about these days: programming. In olden times (roughly, the day before yesterday) all computer owners learned to program because there was very little else to do. Commercial software was rare. Today, the opposite is true and there's no real need to program.

But there are good reasons why you might like to try. For one thing, just as ordinary people can write a best-selling novel, ordinary computer users can write best-selling software. The odds of success are about the same in both cases, but it can be done.

But even if you never make a mint out of machine code, programming can be fun anyway. Languages like Basic and Logo are easy to learn, and powerful enough to write interesting programs. And even the most trivial program can be fascinating when you've designed and coded it yourself.

Whatever you want

Way back in 1982, Don Lancaster wrote: "The micro is a mirror that reflects the personality of its user. One user sees the micro as an artistic tool. Another sees it as a business accounting machine. Another plays music on it, while yet another uses it to control the ventilators on his hog farm."

Not much has changed since then, except for the better. These days you can do even more with a computer, and it's faster and cheaper into the bargain. ●

Technobabble

A weekly assault on computer jargon

RS232 ▪ Standards

Ever since Spitting Image immortalised it in "RS232 Interface Lead: 20 Classic Songs", the RS232 has been a source of amusement to those who know, and yet a source of bafflement to those who don't.

But to everyone who has to use it, RS232 is the curse God forgot to visit upon the Egyptians, worse by far than plagues of frogs and locusts. Ostensibly a "standard" method by which computers can communicate with other devices like printers and modems, RS232 is actually as non-standard as can be imagined.

Some manufacturers provide 25 pins, some only 9 pins, and even when they provide those pins some only use a few of them, while others use fewer and/or different ones. Some use male connectors, some use female, and some use subtle variations on the "standard", like RS423 and RS443.

The only course of action with a reasonable chance of success is to crawl into your dealer's, hurling rose petals at his feet, and beg for a cable that will work with your computer and whatever you want to connect it to.

Generally, you will need to come to terms with the fact that the computer industry uses the word "standard" to mean "unique". The two exceptions to this are "industry-standard compatible", meaning it'll run IBM software, and "de facto standard", meaning "We've sold more of our kit than anyone else so you'd damn well better do it our way".

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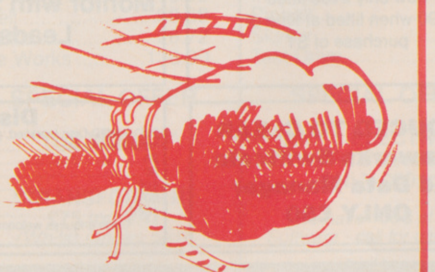

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YuppieWare

Filofax-carrier Peter Worlock looks at software aiming to organise you

Computers have always promised – and often failed – to help you get organised. They've been great at organising thousand-name mailing lists but not so hot on your personal contacts; they've been brilliant at writing business letters, reports and novels, but less impressive for jotting quick notes; and they've done a fine job of managing projects involving hundreds of staff, but getting them to remind you of a meeting next Tuesday morning can be tricky.

All of which, no doubt, explains why the ubiquitous personal organiser, the leather-bound Filofax, has enjoyed such a tremendous success.

But what if you could combine the two: the data-processing capabilities of your computer with the ease and convenience of the Filofax? Two packages for the PC aim to do just that.

Daatafax

PC • £59.95 (£79.95 inc GEM 3)
Kempston • 21 Linford Forum, Linford Wood, Milton Keynes MK14 6LY
(0908 677886)

You have to worry about a company that would deliberately saddle its product with such a bizarre mis-spelled title. But once you get *Daatafax* loaded, it at least looks better than you'd expect.

The appearance is largely due to the use of GEM, Digital Research's Macintosh-like environment. If you have an Amstrad 1512 or 1640 you already have GEM and can buy the cheaper version of *Daatafax*, otherwise you'll have to stump up the extra cash because *Daatafax* will not run without GEM.

Features

You get the three essential Filofax categories: diary, address book, and a notepad. Because of GEM, *Daatafax* is simple to use, being icon and menu driven. So to load a diary you just click on a picture of a diary!

The diary allows you to print one, four or seven days per page, and you simply type in times and accompanying notes as you want. The text editor is fairly crude, but does allow cut & paste so you can move entries around, and there is a search facility to let you find specific appointments more quickly.

As an adjunct to the diary, *Daatafax* will generate a calendar for you, but this is rather limited: a fixed format with three months to a page, and although it will highlight dates that are marked in the diary, you can't use different forms of highlighting for different categories of event.

DAATAfax
IBM PC
and compatibles
KEMPSTON
COMPUTER BASED
PERSONAL ORGANISER

The address book initially has one page for each letter of the alphabet and you treat it just like the real thing. Move the cursor to the start of an entry, then enter name, address, business and home telephone numbers, and a short note if you wish. There is a search facility but, astoundingly, there is no sorting – it's up to you to make sure you enter names in alphabetical order.

The notepad is a limited but usable text editor. You can use cut & paste and search for specific words, and you can choose whether to have 28, 34 or 48 characters per line. But you can't use the normal GEM text attributes such as different fonts and styles like bold and italic, nor can you mix different type sizes within the same notepad.

One unexpected and potentially useful feature is the ability to import GEM .IMG graphic files into your notes, although you can't create or alter pictures from within *Daatafax* itself.

User interface

Because of GEM, *Daatafax* is very easy to use (but then the features are so basic it could hardly be otherwise). Unfortunately, it doesn't provide all the power of GEM which is a pity – even simple enhancements to the text would be a bonus.

Documentation

You get a very rudimentary manual (33 pages of large type and lots of pictures) which spends a disproportionate amount of time talking about GEM rather than *Daatafax*. However, again because of the program's limited features, there isn't a lot to say.

Verdict

Daatafax is more or less exactly an electronic Filofax. You might as well stick to the genuine article because using *Daatafax* on your PC gives you very little that the pen & paper version doesn't.

Yes, you can get neat printouts to stick in your leather organiser, and yes, you can do very crude computer-type things like automatic searching for a name.

Against that, there's the expense of the software, and the bother of loading it every time you want to make a note, or add a name to your address book. None of the modules is powerful enough to make it worthwhile keeping *Daatafax* permanently loaded, and printing odd sheets for insertion in your Filofax promises to be a ridiculously time-consuming exercise.

Oh ... it's also copy-protected – a definite black mark.

✪ ✪

HIGHLIGHTS

- Easy to use
- Can include graphics

DRAWBACKS

- Makes little use of the PC
- Short on features
- Copy protected
- Poor value for money

How are they meant to be used?

The appeal of linking your computer to your Filofax is clear, but how in practice is that actually supposed to work?

The intention behind *Daatafax* and the original *Portex* appears to be to use them as a way of periodically up-dating your Filofax. You type in, say, all your names and addresses on computer and end up with a neat print-out which goes into the Filofax. You can make written additions to this from time to time and then at some later stage add these to the computer file and get a fresh reprint. Both packages provide the relevant stationery together with details for buying refills.

The main problem here appears to be duplication of effort. You write down the information in your Filofax when something crops up and then have to re-key it in at some later stage. This may be worthwhile if the software can help you process the information – or if you've got atrocious hand-writing and are constantly rendering your Filofax unusable!

It's hard to see either package being used as a total substitute for a Filofax (no portability), even if you were happy to limit it to office use – it wouldn't be worthwhile to load up one of these programs every time you wish, say, to add another diary appointment.

Portex Professional (see box next page) overcomes the latter problem by being memory-resident.

Portex

PC • £49 from December 1 • (Portex Professional £149)
Showerings Business Systems • South Bank Technopark, 90 London Road, London SE1 6LN (01 922 8821)

Portex was the original Filofax software, earning critical acclaim and more than a few friends in the last couple of years. But it's about to get a new lease of life with the launch of the upgraded *Portex Professional* – see box.

☞

However, instead of ditching the old (and still eminently usable) version, Showerings has decided to keep it available at a vastly reduced price.

Features

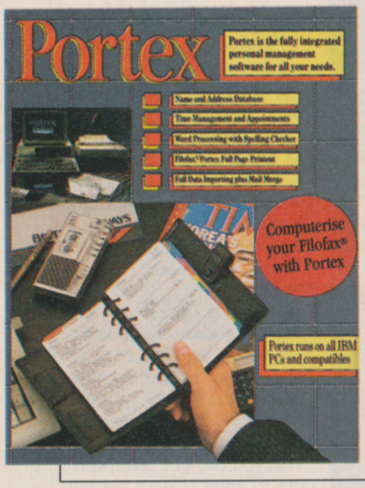
Portex offers the same modules as *Daatafax* – diary, address book and notepad – but there similarities end. Because *Portex* puts the power of the PC to work for you.

The diary, for example, allows you not only to enter dates, times and appointments, but also to repeat entries. So if you specify a birthday as repeating yearly, *Portex* will automatically insert the entry into the relevant date every year. Or you might enter your six-monthly dental check-up and *Portex* will insert that automatically.

Moreover, you can set nagging alarms. If you have to do a monthly report, after setting that as a repeating event, *Portex* will enter it into your diary at the appropriate time each month, but on the relevant day, and every day thereafter, *Portex* will flash a message at you until you acknowledge that you've done something about it.

Your diary can be printed out as one, two or four days per page, or one or two weeks per page.

The address book (confusingly called a directory in *Portex*) offers some similarly advanced features. Entries can include surname, forename, title, multiple telephone numbers, two addresses, organisation name and up to 14 lines of notes. And your file can be sorted by any of the given categories, so you could have two versions, perhaps: one sorted by individual surnames, another by company names.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Finally, there's the notepad, although in *Portex*'s case it is close to being a fully-fledged word processor. On screen it looks rather like *WordStar*, but it uses its own set of control keys. Most of the commonly-used WP functions are included including search & replace (against *Daatafax*'s search only), cut & paste, and various text formatting commands. You can also use various typestyles like bold and underline, but there are some unexpected but welcome functions like the inclusion of a full 80,000-word spelling checker, and the ability to perform mail-merge with files from your address book.

User interface

Although *Portex* is a very powerful program, it remains easy to use thanks to a well-designed menu-driven control system, and the fact that there is an on-line help facility from anywhere within the program.

Most of the control keys are logical, and extensive use is made of the PC's function keypad, but it would have been nice to have *WordStar*-compatible commands in the notepad.

HIGHLIGHTS

- Powerful diary features
- Flexible sorting in address book
- Notepad good enough for most WP needs

DRAWBACKS

- Needs to be permanently loaded in order to get full benefit

Documentation

The manual is nothing if not comprehensive – 250 pages covering every aspect of the software. It's neatly laid out, and nicely broken up into basic and advanced features so you can work your way into the program gently. It's completed by a glossary, a full index, and a list of *Portex* commands.

Verdict

Portex is close to what a computerised Filofax ought to be: a powerful program in its own right that also prints out on Filofax-style paper.

With *Portex*'s features for sorting data, and automatically handling your diary, you really start to get the benefit of using your PC to manage your personal and business affairs. Any criticism of the program is more a case of extra features it would be nice to have, rather than essential features missing and most of these are included in the upgraded *Portex Professional*.

✪✪✪✪

Portex expanded

With *Portex Professional*, the computerised Filofax comes of age. Showerings has learned a lot from *Sidekick*, Borland's definitive computerised personal organiser, and has gone on to incorporate its best points with the strengths of the *Portex* original.

To begin with, *Portex* now works as a memory-resident program, so you no longer have to tie up your PC to use it. You can work in your most common applications software and simply call up the various *Portex* modules at the press of a key. This alone makes it enormously more useful.

Secondly, if you have a Hayes-compatible modem you can have *Portex* automatically dial phone numbers from your address books. Other useful features include a stopwatch for event-logging (so you can time phone calls, and professionals charging by the hour or day can calculate the time spent on various tasks); a rudimentary keyboard macro facility; and sundry enhancements to sorts, searches, and diary appointments.

You have to wonder why Showerings doesn't go the whole hog and add in more of the *Sidekick*-like features like a mini spreadsheet. But even as it stands *Portex Professional* can do a lot to get your life in order.

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Perfect pin polishing

Best tip this week!

Problem: Frequent use of your dot matrix printer will eventually give you a print-out which is less than satisfactory. You will notice that the descenders (the tails on letters such as g j p q and y) are usually the first bit of the character that goes missing. This is due to the ink from the ribbon collecting around the 9 pins which are positioned vertically at the front of the print head. Additionally, there's dust and fluff which tends to make the bottom pins stick in their casing.

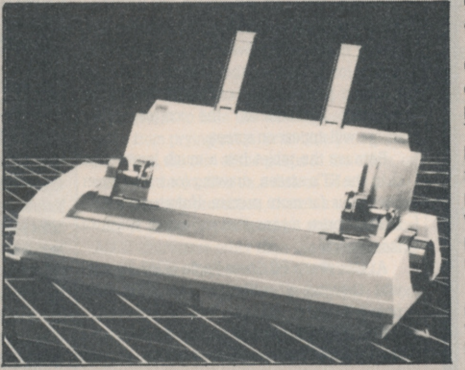
Cure 1: Have it done professionally. But you'll be without your printer for a few days and, of course, it will cost you.

Cure 2: Do it yourself. It really isn't that difficult and will only take ten minutes or so.

The tools: You'll need a pair of thin-nosed pliers, a clean medium bristle toothbrush, a can of WD 40, a *clean* piece of cotton cloth and some white spirit.

The method: This account is largely intended for the PCW's printer, but the basic principles apply to all dot matrix machines. Firstly, switch off the power and disconnect your printer. Take the paper tray off by lifting it vertically and upwards, followed by the front dust flap which lifts off in its horizontal position. Looking inside with the printer facing towards you, take out the ribbon cassette by gently lifting it by the fins. You will see a ribbon cord attached to the bottom of the print head (don't attempt to pull this out!) with a clip fastened over it.

Taking the thin-nosed pliers, gently but firmly grasp the lug on top of the clip and lift up towards the print head. The clip should come away quite easily. Remove the print head from its chassis by grasping the print head with your fingers and easing it towards you about an eighth of an inch, then lift up. Be careful when handling the print head not to pull off or crease the ribbon cord which is still attached to both the printer head and the printer.


• The PCW printer – cleaning up those pins

Cleaning up: Wipe all round the print head (not the pins) with a clean dry cloth. Now gently dab the pins, which will soak up any excess of ink. But do not wipe or scrub them with the cloth. With a squirt of WD 40 on the toothbrush, lightly scrub over the pins for a few seconds, followed by dabbing them with the clean cloth. Repeat this operation until all the pins come clean.

Putting it back together: Carefully place the print head back on its chassis by inserting and pushing towards the platen roller. Then insert the clip in its retaining lip and push it gently down over the ribbon. Clean all round your printer and remove any debris which may have fallen in. Wipe the platen with white spirit. Put your ribbon cassette back, plug in and switch on. Your characters will print like new again. Honest. That was pretty painless, wasn't it?

David Axford & Chris Bryant, Seaton

HELP! Fast driving

Somebody told me that you can buy a software program that makes the Amiga 500's disk drive faster. Is this true, and where can I buy one? It sounds like something everyone would want because the Amiga drive is so slow.

Ian Bell, Edinburgh

• You can't speed up the drive with software, but it is possible to make *using* the drive a lot quicker. A program that does this is called a cache.

Cache programs work by setting aside an area of the computer's memory as a temporary holding area for information that is being moved to and from the disk drive. Say you write something to the disk; the cache program stores it in memory before loading in the next chunk of data. Now, if you want the first chunk back, instead of loading it from a slow disk drive the cache program pulls it out of very fast RAM. Provided the cache is large enough, several such chunks can be cached.

What makes a good cache manager is its intelligence in deciding what to keep in memory and what it can get rid of. The best programs use an algorithm that throws away the data that hasn't been used for the longest time.

One such program for the Amiga is called *FACC* (for *Fast ACCess*, one imagines). This can speed up disk access by as much as ten times.

However there are cache catches. The first is that you really need expanded memory to take advantage of caches; the A500's 512K simply isn't enough. Secondly, you'll only see a benefit when using programs that do a lot of disk accessing. For software that loads entirely into memory – most games and a lot of utilities – you may as well not bother.

But for large programs – e.g. word processors, desktop publishing packages – which constantly pull in "overlay code" from disk, a cache program can make life with the A500 a lot more pleasant.

TIP Killing ST crackling

Like your reader in issue one, I have also experienced crackling from the back of my brand new Atari 520 STFM. It seemed to happen when I was operating the on/off switch in a slightly leisurely manner, and I put it down to arcing across the switch connects (although I have not opened up the case to verify this).

My solution has simply been to get into the habit of clicking the switch smartly on or off, and the problem has gone. Perhaps other readers, or even the great unapproachable one – Atari Corp – could throw more light on the matter.

By the way, *New Computer Express* is excellent, and if you can maintain this standard in a weekly publication without the price going through the roof, then I will be compelled to become a subscriber for the very first time.

T. Murray, Gillingham

HELP! Dotty and fading

My four-year-old Brother M1009 dot-matrix printer has served me well and I'm still happy with it. Unfortunately, I'm having trouble finding replacement ribbons. Can you suggest a source?

Jenny Pearce, Plymouth

• Try Computers By Post at 12 Sutton Lane, Banstead, Surrey SM7 3QP, or give them a ring on 01-681 5966. They have ribbons for just about every dot-matrix and daisywheel printer available, and a few that have been discontinued.

TIP Dirt, dust and CPCs

I write books and magazine editorial on my Amstrad CPC 6128, which after three years remains a very reliable machine I might add.

Nevertheless there did come a point (after two years) when I had bashed the keys so much that some of the most frequently used ones began to grate inside the key wells and progressively became more and more unusable. They would literally crunch their way down, and when I was typing reasonably fast certain letters would not register on the screen. Very frustrating, this.

So, I thought, that's it. This computer's had it, better buy a new one.

Then I thought, well perhaps I could simply get hold of a new keyboard part – somewhere, and probably not direct from Amstrad PLC itself. That would at least be cheaper than buying another machine. So I took the casing apart, pulled out the keyboard wiring from its socket, removed the metal chassis, and found the relevant part number on the underside of the plastic keyboard base.

Having got that far, I looked at the keyboard membrane matrix and found deposits of plastic dust – ie, the result of all that grating. I popped out a few of the worst afflicted keys, had a look at the key wells, which despite the damage didn't really seem too bad. Then it came to my mind that if I oiled the wells, the keys might work better.

I removed all the keys and neatly arranged them on a table top in the right sequence. I cleaned up the top side of the keyboard base (which was inhabited by dust, bits of hair, cookie crumbs, and sundry other unmentionable things), then very lightly oiled the wells with the end of a Q-Tip using 3-in-1 oil. I then put all the keys back (they can only go in one way up, incidentally), and put everything else back together.

I found that I had a keyboard which worked as good as new, if not better. It took me less than an hour to do, and I have had no trouble whatsoever since then – and that was about 10 months ago.

I also saved myself a lot of money.

A Van Dam, Glastonbury

HELP! Slot shortage

I have a PC-compatible which I have expanded over the last year to include a 30Mb hard card and internal modem. The trouble is, I have just bought the AMS *Finesse* desktop publishing package with mouse and hand-held scanner which I can't use – all six slots are filled and the scanner needs a slot of its own. I would have removed the RS232 card because it wasn't being used, thanks to the internal modem. But the AMS mouse uses the serial port so I can't do that now. And I wanted to add more memory later.

What can I do?

Michael Rees, Stevenage

• You don't say what's in the other slots, but I'm assuming they look something like this: video display adaptor, parallel card, serial card, floppy drive controller, modem and hard card.

There is a simple solution – buy a single multi-function card which will replace two or three of your existing cards.

You could opt to expand your memory at the same time. Semaphore Systems produces a card offering 384K of RAM, serial and parallel ports, joystick interface and battery-backed clock/calendar for £215. If you prefer not to add the memory at this stage, you can buy a single card offering the other functions for only £69.

If you have a CGA card installed, and depending on your floppy drive set-up, you can free up three slots by using a single card for CGA, twin floppy controller, serial, parallel, games port and battery-backed clock calendar. This costs £114 from Technomatic. However, this will cause problems later if you want to upgrade to EGA or VGA graphics.

There are plenty of alternatives – just pick the combination that best suits your existing usage and planned expansion.

Some useful addresses are Semaphore Systems, 7 Moreland Court, Finchley Road, London NW2 2PJ, tel 01-435 6315; Digitask, Unit 2, Gatwick Metro Centre, Balcombe Road, Horley, Surrey RH6 9GA, tel 0293 776688; Technomatic, 17 Burnley Road, London NW10 1ED, tel 01-208 1177.

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ST

Alternatives to the mouse

While the mouse is a great device for general pointing and clicking, it isn't that good for accurate drawing. Two expensive alternatives have recently made their way onto the ST: *Cherry Graphics Tablet* (the tablet isn't new, but the software driver is) and *Eagle's Touch Window*. Can they steal the mouse's thunder?

Cherry's system consists of a board, stylus and puck. The stylus and puck do the same thing – they are the drawing instruments. You simply decide which weapon you prefer. The board (or tablet) is the drawing area; by touching parts of the board with one of the drawing instruments, the corresponding image will appear on screen.

Because the tablet has a much larger area than the ST's screen, drawing (or tracing over objects) is far more precise. Unfortunately, its £632.50 price means that its out of reach of most people.

At this year's PC Show Eagle (0222 390286) was showing off a touchscreen affair. Only now is it ready!

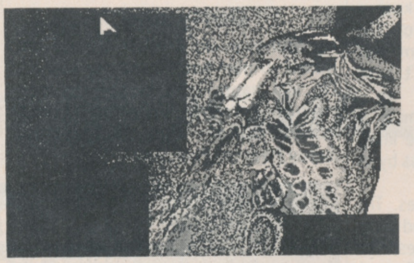
The £399.99 system works by having a transparent, flat, pressure-sensitive surface fitted to an ST monitor that sends co-ordinate information to the computer when touched. As your fingers are rather large, it isn't hard to understand why the touchscreen has comparatively limited resolution. Indeed, only 256 points in both X and Y directions. Although the touchscreen is less accurate than a mouse, it offers a very friendly work environment and is ideal for in-store demonstrations, interactive training, public information access points and so on.

Flair – at last!

After last week's performance with *Flair Paint*, I decided there was only one thing to do: visit AMS and not move from the offices until I had seen the product.

I obviously turned up at the right time, because not only had the software returned from mastering, but so too had the packaging and manual. Oh joy! Here's a brief insight into what *Flair* offers (for the definitive review check next issue of Format):

The user-interface is unbelievably slick. Real-time window movement – as opposed to GEM's system of doing things which simply shifts an outline of a window before plonking it elsewhere – sexy tablet (AMS's word for windows) zooms, and sparkles.



• **Flair Paint: twinkle, twinkle little star**

GEM IMG, *Degas*, *Neochrome* and *Art Director* files are supported. The canvas (draw area) can be anything from 32 pixels square to whatever memory permits. Some of the fancier facilities include slip and slide, shear, 12 levels of magnification, Bezier curves, starred lines, diagonal fills and automatic shade selection between two colours.

Jeff Lawson and Mark Picavance (programmer and graphics designer) have to be congratulated. They've done a superb job. Definitely the best ST art package to date. Pity the price has been hiked to £34.95. Further details from AMS on 0925 413501.

Snippets

- Arnor of *Protext* fame has moved to 611 Lincoln Rd, Peterborough, PE1 3HA (0733 68909)
- Eidersoft has joined forces with Power Computing and moved to a new location: Power House, 44 Stanley Street, Bedford, MK41 7RW (0234 273000)
- Firebird's *Flying Shark*, a vertical-scrolling (full-beef as Logotron would say) shoot-em-up, is well worth getting hold of. Keep an eye out for ST/Amiga Format's next cover disk if you want a taster.
- *Tempus*, the ultra-fast text editor, which was originally distributed by Eidersoft is currently being bundled with Metacomco's latest version of *Macro Assembler*. *Tempus II*, which will be even faster, is to be distributed by HiSoft (0525 718181). No price or launch date yet. More details when I have them.

Hyper hype

***No surprises with Atari's* HyperPaint*, I'm afraid. It certainly doesn't offer anything startlingly new. Okay, so you can edit GEM IMG files and it's reasonably priced, but apart from that there is nothing that can't already be found in* Degas Elite*.* HyperPaint *certainly doesn't offer the stunning palette-size of* Spectrum 512 *or* Quantum Paint*. Ah well, there's always* HyperPaint II.**

Flight Simulator II tricks

Who says flight simulators aren't fun? Just feast your eyes on some of *Flight Sim*'s quirks. Don't change any of the controls once the game has loaded. Select Learjet, turn Slew on, press Q and keep it down until you see the altimeter needles rotate in opposite directions (that is, the large needle going clockwise and the small needle going anti-clockwise). Keep the key down for another 20 seconds and then slow down using key A until the needles come to a standstill.

Turn Slew off and let the plane free fall. Power up the plane using the mouse or key 9. Now sit back and watch as runways pass you in mid air?!!

How about flying without any fuel? Switch the Engine on in the Realism mode so that keys 1 and 2 act as magnetos. Hitting 2 forces the magneto box to read 'start' before flipping back to 'both'. If – by pressing 2 – you get the message 'lean', press 1 to get back to 'both'. By continuously pressing key 2, the engine can be coaxed into life.

If you set full flap with plenty of up-elevator while bashing away at the 2 key, ensuring the magnetos never hit 'lean', the RPM (no relation) will increase above the 2000 mark. Even though the fuel tanks read empty, oil temperature and pressure will be normal allowing you to build up speed for takeoff.

Finally, if you fancy visiting some of the more important areas in San Francisco try setting your sights to: North 17323.709, East 5065.5148, Alt 200; North 17277.261, East 5104.2925, Alt 200; North 17208.624, East 5137.8736, Alt 200.

Richard Monteiro

PC UPDATE

All that RAM

Funny how standards change. In particular, standard configurations for micros. There was a time, this side of the turn of the decade, when 16K and cassette desk was a good basis for a home micro, or a small business one at a pinch. The TRS-80 Model 1 and Commodore PET were good examples of this regime.

Then, a couple of years later, when 64K and twin floppy drives took over as the workhorse in the office. The trusty Superbrain, complete with CP/M and 80 x 25 text mode screen, became the normal configuration.

It ain't heavy

If turbo was the computing word of '87, Lite looks set to be the same in '88. After lager comes a DTP program, from the house that brought you 1st Word Plus and Timeworks DTP. GST's Timeworks DTP Lite is designed as an entry into DTP at the very agreeable price of £49.95. It's a cut-down version of the full Timeworks DTP (DTP Hevy?), but still features two fonts in both bold and italics and sizes up to 36 point, can import text and graphics from a variety of PC sources and includes graphics drawing, text flow and word wrap and multiple page views.

What you don't get is any laser printer support, paragraph tags or documents over 10 pages long. GEM is integrated into the product, so you don't get the GEM Desktop thrown in, and you still need a half megabyte PC at least (more for EGA). Two of the nicest things about the package is that its files are upwardly compatible with the full product, and should you decide to upgrade the total cost will be little more than the one-off cost of the full package. Find out more from Electric Distribution on 0954 61258.

At a later date, closer to the present one, the standard became 640K a single floppy and a 20 Mb hard disk, running MS-DOS. On each occasion, the next generation of equipment was sold on the added software goodies the extra memory would make possible. Now, we're commonly told, we must gear up for MCA, OS/2 and the chance to multi-task ourselves into oblivion.

There are two points not given much coverage in all the blather from the boys in Big Blue. The first is that the main reason you're going to need 4 Mb or so of memory as a basis for the new machines is that OS/2 itself takes 2.5 Mb. It's hard to believe a system can be so much bigger and better than MS-DOS that it justifies four times the RAM.

The second point is that most of that extra room is taken up providing multi-tasking. There can be few who don't know what multi-tasking offers, but just to be boring here's a quick recap. Multi-tasking is the ability of powerful micros to run more than one program at the same time. What in fact happens is that the micro-processor shares its time between two or more programs by switching between them many thousand times a second.

Multi-tasking is not the same as context-switching, which is what happens when you pop up a memory resident program such as *SideKick* or *TopCopy*. With a pop-up program, the main application is halted while the other is running. With multi-tasking, both programs (or more if you're running them) continue to function at the same time.

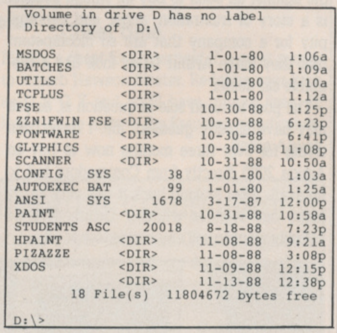
The question really is why should a single user need to multi-task? In business you're likely to want to be in full control of all the applications running on your PC. There's only one case I can think of where you might want to do two things at once (I exclude spooling text files, since most competent word processors do this anyway): running a complex recalculation on an immense spreadsheet. I reckon probably only 5% of users would really want to write memos while recalculating.

If you're running a network with several users who will want to be doing different things, fine – but OS/2 specifically excludes multi-user applications. Unless OS/2 is a much more stable operating system than Windows (which already multi-tasks well-behaved programs) or AmigaDos on the Commodore Amiga, the vast majority of today's PC users will have no possible use for it.

Furtive moves

If you want to hide the workings of your program from prying users, or to hide your games files from the rest of the peeps in the office, or even put secret files on a disk as a form of elementary copy protection, there's a very simple way of doing it. You must be able to produce ASCII characters other than the alphanumeric ones from the keyboard, though. Try this.

Hold down the [Alt] key, press [2] [3] [4] on the numeric key pad and then release the [Alt]. The last thing you might expect to see is a capital Greek omega (last thing, omega, joke?), but that's exactly what you get. By holding down the [Alt] key you can produce any character in the ASCII set by typing its ASCII number on the numeric pad. The following wizard wheeze depends on this.

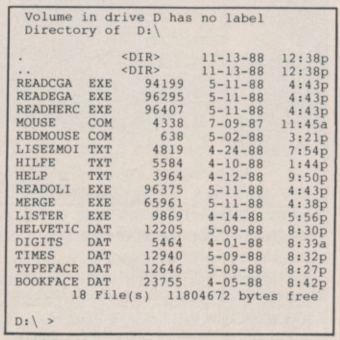


```
 Volume in drive D has no label
 Directory of  D:\

MSDOS        <DIR>       1-01-80   1:06a
BATCHES      <DIR>       1-01-80   1:09a
UTILS        <DIR>       1-01-80   1:10a
TCPLUS       <DIR>       1-01-80   1:12a
FSE          <DIR>      10-30-88   1:25p
ZZN1FWIN FSE <DIR>      10-30-88   6:23p
FONTWARE     <DIR>      10-30-88   6:41p
GLYPHICS     <DIR>      10-30-88  11:08p
SCANNER      <DIR>      10-31-88  10:50a
CONFIG   SYS       38    1-01-80   1:03a
AUTOEXEC BAT       99    1-01-80   1:25a
ANSI     SYS     1678    3-17-87  12:00p
PAINT        <DIR>      10-31-88  10:58a
STUDENTS ASC    20018    8-18-88   7:23p
HPAINT       <DIR>      11-08-88   9:21a
PIZAZZE      <DIR>      11-08-88   3:08p
XDOS         <DIR>      11-09-88  12:15p
             <DIR>      11-13-88  12:38p
       18 File(s)  11804672 bytes free

D:\>
```

• **A hard disk directory with a hidden sub-directory...**



```
 Volume in drive D has no label
 Directory of  D:\

.            <DIR>      11-13-88  12:38p
..           <DIR>      11-13-88  12:38p
READCGA  EXE    94199    5-11-88   4:43p
READEGA  EXE    96295    5-11-88   4:43p
READHERC EXE    96407    5-11-88   4:43p
MOUSE    COM     4338    7-09-87  11:45a
KBDMOUSE COM      638    5-02-88   3:21p
LISEZMOI TXT     4819    4-24-88   7:54p
HILFE    TXT     5584    4-10-88   1:44p
HELP     TXT     3964    4-12-88   9:50p
READOLI  EXE    96375    5-11-88   4:43p
MERGE    EXE    65961    5-11-88   4:38p
LISTER   EXE     9869    4-14-88   5:56p
HELVETIC DAT    12205    5-09-88   8:30p
DIGITS   DAT     5464    4-01-88   8:39a
TIMES    DAT    12940    5-09-88   8:32p
TYPEFACE DAT    12646    5-09-88   8:27p
BOOKFACE DAT    23755    4-05-88   8:42p
       18 File(s)  11804672 bytes free

D:\ >
```

• **...hiding this lot!**

The ASCII character 255 shows on the screen as a space, but unlike the regular space (ASCII 32) is allowed in file and directory names. To hide a file, simply change its name to one or more 255 characters. The same technique can be used when making directories. Even if you know this method has been used you'd still have to try up to eight combinations to find the 'hidden' file or directory.

Simon Williams

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AMIGA BLITZ

Case for Conversion?

So, games software companies are finally starting to support the Amiga. I don't have to tell you what a superb games machine the Amiga makes, but as more and more games finally arrive, what do we see? Nearly all are just direct ports from the Atari ST, and don't use the Amiga's far superior capabilities.

This is a fact that has annoyed me immensely for a number of months now. It seems that most software houses are content to just throw code across from the Atari with little or no modification, the result: games that are no better than the Atari versions but still cost an extra fiver!

It's about time software houses stopped ripping off Amiga owners and started producing games that are written to take advantage of the machine's unique capabilities. So come on you money-grabbing software houses, get your programming acts together!

Incompetent Commodore

Thinking about upgrading to an Amiga 2000? Where will you buy it from? Commodore? Yeah, seems like the logical choice, as that will cut out the middle man. Dealing with Commodore direct should make things move a lot faster, right? Wrong!

What follows is a story of one man's struggle against all odds to buy an Amiga 2000. It is a story of frustration, anger and eventual pity for a company that are so incompetent that they make Arthur Daley look like a reputable car dealer.

The poor tortured sole in question is, as you may have already guessed, me. I have been trying for over three months now to buy an Amiga 2000 directly from Commodore but to no avail. After looking back it can very easily make one wonder whether Commodore do actually want to sell any computers at all.

• The Amiga 2000 – against all odds...

It all started a few months ago, I felt that my aged A1000 was finally on its last legs and it was about time that the poor thing was put into retirement. Endless hours of C programming and *Marble Madness* had finally taken its toll.

I contacted Commodore hoping to purchase an A2000 at reduced price. "You'll have to contact Spire Communications, the company that is handling our journalist discount scheme", replied a rather gruff voice from Commodore's sales department.

So, like a sheep to the slaughter, I phoned Spire Communications. "Well, we are still waiting for the price list to come through from Commodore, can you phone back next week?". I trustingly agreed. Weeks passed by and each time I phoned Spire the answer that awaited me was always a "Can you phone back next week?". Speaking to Rob Waite at Spire became almost a weekly ritual as the weeks went on until I finally realised that Spire were as much a victim of Commodore's incompetence as myself. It was time for me to start annoying Commodore so much that they would eventually end up begging me to take the machine.

I continued to badger Commodore until finally, after three long months the elusive 2000 arrived. I opened the box, removed the machine from its box and took one look at what sat in front of me on my desk... "Commodore! you useless £$*!@!!!". Commodore had, in their infinite wisdom sent me one of the original 2000s. This machine has no composite video output, uses the old rectangular Agnes graphics chip, has the extra 512k of ram on a rather dodgy plug in card and is, not to put too fine a point on it, a real dodo. Well Commodore watchers, the saga continues...

Say it again, Darth

Those of you who have bought Domark's follow up to the successful Star Wars, The Empire Strikes Back, may be intrigued to hear that hidden within the program are a multitude of extra sound samples from the film. To access them, hold down the HELP key while typing 'XIFARG ROTKEV'. Let go of the HELP key and the words 'Cheat Mode' will appear. Now try pressing any key from 1 to 0 along the top of the keyboard for a surprise. Once you've heard enough, press RETURN to resume normal play.

CLI'ing with a Single Drive

If there is one thing about the Amiga that confuses most new users it is the machines Command Line Interface (CLI). Unlike lesser machines like the PC (Sorry Simon!), the Amiga does not have any resident DOS commands, therefore they must all be loaded from your boot disk. However, there is a way around this.

The answer is to copy them to your RAM disk and then assign a search path to them. For the sake of this example, say you wanted the commands DIR, TYPE, DELETE and CD made into resident commands. You would firstly enter the following DOS command to copy them to your RAM disk:

```
COPY C:Dir|-
Type|Delete|CD RAM:
<Press RETURN>
```

The four DOS commands will then be copied to the RAM disk. The next step is to assign a search path to these commands which is achieved using the AmigaDOS PATH command. The Path command tells AmigaDOS that every time you enter a command, you want it to search the named disk or directory for that command. As our commands are now in the RAM disk, we want AmigaDOS to look in the RAM disk. This can be achieved by entering :

```
PATH RAM:  <Press RETURN>
```

Now try removing your Workbench disk and inserting another disk and type 'DIR' and see what happens. The Amiga will not ask you to 'Insert Workbench' unless you enter a different command from the four in the RAM disk.

Jason Holborn

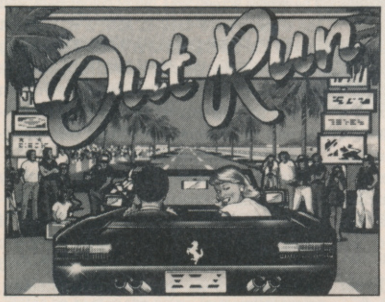
SPEX

The Christmas rush

It's almost with us once again – that time of year when hordes of punters flood the shops and trade hard-earned cash for the latest gigagame. Yes, comrades, Christmas is coming! In fact, if you believed the huge adverts, which in some cases make certain car manufacturers' efforts look puny, Christmas actually arrived some time in October!

As far as the software houses are concerned, Christmas is most definitely a season to be jolly in. The fact is, they sell more product in the Yuletide period than at any other time, which means morel filthy lucre in their deep pockets.

Out Run gripes



• US Gold's Out Run – will we do better *this* Christmas?

Making loadsamoney last year was US Gold with *Out Run*. The hype and excitement surrounding the game was incredible. A local shop owner told me it was outselling most other titles 5 to 1, and that practically everyone buying a Spectrum was requesting a copy of *Out Run* too. The game's popularity is enduring. I was amazed to see it's recently re-entered the Speccy top 10. Is there anybody out there who doesn't own the thing? *Out Run*'s phenomenal success is particularly strange when you consider the actual quality of the game. It wasn't a terrible conversion, but hardly captured the speed or exhilaration of its arcade brother. The press didn't lavish it with praise, either, which means most people donated £8.95 to US Gold and bought it blind. A definite case of marketing and hype winning us over.

I've got nothing against arcade conversions. I like to machine-gun a few of the enemy in *Operation Wolf* as much as the next man, but it's got to the stage when the software biz has become too dependent on the arcades. The words 'coin-op conversion' seem to guarantee decent sales nowadays.

Wouldn't it be great to see something original and innovative do well on the Speccy this Christmas? Something not licensed from the arcades or based around a toy, footie player or film? It's up to us to vote with our wallets!

And on that rallying cry I'll get off this soapbox before it collapses. If you have got any comments, send them in to me at express.

Gargoyle remembered

The great thing about the compilation and budget re-run fever sweeping the industry is the way it allows a new recruit to the computing business a chance to sample some vintage Spectrum action.

I think I was a bit young to remember Gargoyle Games' (later FTL) early releases the first time around, so was only aware of their sterling work for Elite in the form of *Scooby Doo* and *Thundercats*. Looking through their back catalogue, now released on the Rack It label, I was surprised to discover that if anything their old stuff is even better, especially in terms of concept and originality.

The first Gargoyle game, *Ad Astra*, is a strange 3D arcade offering, which is great fun to play but a bit lacking when compared to their trilogy of brain-stretching puzzlers *Tir Na Nog*, *Dun Darach* and *Marsport*.

The first of these two are related, and both feature a hippy-type character called Cuchulainn. He's beautifully-animated as he legs it round a labyrinth of city streets. *Dun Darack* is better than its predecessor, with in-depth character interaction and even tougher puzzles. *Marsport* is viewed in a similar fashion, and has inherited the stylish graphics of the other two. This time the drama is set in a futuristic alien complex as you control the hero, John Marsh, and attempt to recover some secret plans. Along with the other two, it'll take at least a month to complete.

And then there's *Light Force*, the fifth offering from Gargoyle – its large, colourful sprites attracted quite a fuss at the time. There's a solid core of gameplay under the glossy graphics, making it an excellent shoot-em-up.

All the above are out on Rack It, priced £1.99.

Cheat time

Finally, a cheat for *Cybernoid II*, a great sequel to superb Hewson blaster. Redefine your keys as O R G Y and you'll have infinite lives. I'll leave you to discuss the Freudian significance.

Robin Alway

Supreme compilation

Just to show they're in on this Christmas goodwill lark, most of the major software houses are offering a selection of value-for-money compilations.

There's a multitude around. Probably the best I've seen is Supreme Challenge. It contains only five games, which seems fairly poor when compared to the ten and twenty-game packages on offer from Ocean and US Gold. It's certainly quality and not quantity with this one, though.

The impressive line-up is Elite, ACE 2, Starglider, Tetris *and* Sentinel. Starglider *was the fast vector-graphics shoot-em-up which helped to flog a fair few ST and Amigas in its 16-bit incarnation. I wouldn't let that put you off, though. The Spectrum version is brilliant, real fast and furious stuff.*

ACE 2 *is probably the weakest game of the compilation; it is a flight sim with unrealistic combat overtones.* Tetris *is an action-packed puzzle game which you'll start off hating, but after 3 or 4 hours' play will admit you're hooked. The* Sentinel *was released last year to huge acclaim. It's a fascinating and totally original game based around a hide-and-seek theme. I love it.* Elite *doesn't need much introduction – suffice to say, if you haven't played it you haven't lived. Originally released on the BBC (remember those?), it's a complex mix of strategy and dogfights. Popularity has meant conversion to practically every computer, and you can rest easy in the knowledge that the Speccy version is one of the best.* Elite *is one of my all-time favourite games, and its inclusion transforms the compilation from a good one to probably the best thing value-for-money wise you can buy this Christmas. Go on, give your Speccy a treat!*

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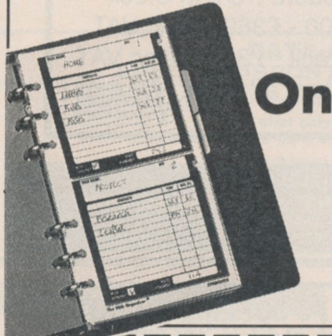

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SECTOR 64 SECTOR

New releases

Something to smile at this week, as we check out some new releases heading your way.

Remember that great game on the Atari ST, *Startrek*? Well at last it's appearing on the Commodore 64. Firebird say it will be out at the end of November. *Startrek* will be £9.99 on cassette, £12.99 on disk.

Budget house Alternative have lots of games for Christmas this year, with titles like *Starpaws, Graham Gooch's Test Match Cricket, Who Dares Wins Two, Slug, BMX Ninja, Back To Skool, The Double*, and those great cartoon characters from *Oink* and *Through The Trap Door*.

And that's not all – they're promising a full-price title under their Again Again label, with *The Monsters* at £9.99 on cassette. Christmas should mean stockings full of classics.

Software house Rebel are promising us that great arcade hit *Shinobi* for January. The game features five missions, each with 3-4 separate stages taking the player through a rich assortment of scenes. You, as Joe Mushashi, master of Ninjusu, must single-handedly penetrate the opponent's territory armed only with a sword and Shuriken (throwing stars) to rescue the little ones, who have been captured by a syndicate of evil Ninja outlaws.

Binary Design – responsible for *Glyder Rider, Motor Bike Madness* and many more – did this conversion, so we could have a nice arcade game on our hands.

Listing

This week's listing is an "INTERRUPT SMOOTH SCROLLER". This scroller will run smoothly while any Basic program is running. The scroll routine is under Interrupt, which means that it will run at all times even if Basic is doing some very difficult jobs. If you wish to turn the scroller off at any time in your program then:

POKE49159,31:SYS49152 (this will turn it off)

POKE49159,13:SYS49152 (this will then turn it back on)

Lines 10 – 52 are the data for the machine code program as a Basic loader form. Lines 56 – 74 is where you enter your scroll text in memory. Your normal Basic program can continue as normal from 92.

The whole listing must be typed in as one. If you include more prints after lines 56 – 74 you will give yourself a bigger area in memory for your scroll text. But you must remember that the "@" sign must be at the end of all text. If not, the scroller will not end.

```
10 B=49142:FORL=0TO145:READA:POKEB+L,A:NEXTL
12 DATA 120,169,192,141,21,3,169
14 DATA 13,141,20,3,88,96,169
16 DATA 1,173,14,192,201,0,240
18 DATA 27,201,1,240,43,169,27
20 DATA 141,17,208,169,1,141,25
22 DATA 208,169,127,141,13,220,169
24 DATA 129,141,26,208,76,49,234
26 DATA 169,58,141,18,208,169,192
28 DATA 5,251,141,22,208,169,1
30 DATA 141,14,192,76,26,192,169
32 DATA 255,141,18,208,169,200,141
34 DATA 22,208,169,0,141,14,192
36 DATA 165,251,201,0,208,10,169
38 DATA 7,133,251,32,105,192,76
40 DATA 26,192,198,251,76,26,192
42 DATA 162,0,189,1,4,157,0
44 DATA 4,232,224,40,208,245,160
46 DATA 0,177,254,201,0,240,10
48 DATA 141,39,4,230,254,208,2
50 DATA 230,255,96,169,196,133,255
52 DATA 169,1,133,254,96,0
54 POKE648,196:PRINT"[CLR HOME][HOME] ";
56 PRINT "THIS IS WHERE YOUR SCROLLER ";
58 PRINT"TEXT WILL GO.USE THE '@' SIGN";
60 PRINT" TO LOOP YOUR SCROLLER WHEN ";
62 PRINT"NEEDED.THE SCROLL ROUTINE IS ";
64 PRINT"ABOVE 49152 SO IT WILL NOT "
66 PRINT"GET IN THE WAY OF BASIC MEMOR";
68 PRINT"Y ONCE STORED IN THERE AND RUN. ";
70 PRINT"THE SCROLL TEXT IS PLACED AT  ";
72 PRINT" 50176.THE MORE PRINTS THE  ";
74 PRINT"MORE SCROLL TEXT YOU CAN HAVE";
76 POKE648,4:PRINT"[CLR HOME]":POKE254,0:
POKE255,196:SYS49152
78 GOTO78
```

How it works

The smooth scroller works on an illusion. The location in memory 53270($DO16) is subtracted by one until it reaches zero. When it does you reset it back to seven and move the data on the screen back one block. This makes your eyes think that the block moved from its last position to its new position pixel by pixel, when actually it moves every (0-7) pixels.

Tip time

This week's poke is for that hyperspace wheelchair in *Scout*. Dig out your copy and push the tape into your internal drive (if you have one). All you have to do is load the game as normal, reset the computer or runstop & restore the game on the title screen (don't worry if you see a lot of mess on the screen). Just type "SYS64738" and press return.

After the computer has reset, type the following if you want infinite scouts:

POKE 2484,173
SYS 33216

Or, if you want to play without a scratch:

POKE 37218,96:POKE 8780,96
SYS 33216

Demos

I've just seen the great new demo from *Industrial Light & Music* from Compunet. Their directory can be found at (IL+M). I've chosen this demo to be this week's favourite because it really shows off the 64's hardware. The whole screen was full of colour bars, and the colours were used in such a way that it looked like the 64 had over 1,000. Then, using a trick with the Vic chip called "FLD" (Flexible Line Distance) they had a very well-drawn picture by TOB moving up and down on interia over the colours. The picture was accompanied by music from *Starball*.

Most demos these days can be found by joining public domain software libraries – most advertise in magazines. Another way of getting demos is to join Compunet. When you join you get a "free" modem plus a year's Gold subscription. If you want further information, then why not give Jane Firbank of Compunet a ring on 01-997 2591.

One more way of getting demos is to attend exhibitions. There they have stands which sell disks at good prices, action-packed disks full of great demos.

Ian & Mic

CPC centre

Disk doctor to the rescue

It seems you were absolutely stunned by the printer lead modification I told you about last week. So much so that nobody's bothered even to comment. I'm going to ignore public opinion totally (I didn't get where I am today, etc.) and underwhelm you with another tip that involves violence, mayhem and a CPC.

This week's marvellous solution is to do with the disk drive, which occasionally refuses to read disks, coming up instead with an infuriating read error. The symptons are that although the disk motor starts up, the disk head remains totally silent.

The cause is that a screw on the drive head has become loose, generally through vibration. After that, the head moves beyond the stop, and cannot move back. The alternatives are: return the machine if it's under guarantee; pay for a repair; or do it yourself. Tightening the screw takes almost no time at all, although you have to remove the case to get at it. And that voids the guarantee – well, I did warn you.

To effect the repair: open the machine, undo the screw slightly, move the head past the headstop, and tighten it again. No trouble. If you're feeling really brave you can put some Blutac on to stop the screw from untightening again.

Mags programmed for the '80s

Now it can be told. This week sees the belated 'official' admission by Database – two weeks after we broke the story here in New Computer Express – that CPC Computing is merging with the official Amstrad Computer User from January.

ACU's editorial office is 169 Kings Road, Brentwood – home of Amstrad itself. (Nice to see the company taking an interest in the CPC, even if it is just buying up a now defunct title.) Mike Cowley of Database was reported on Micronet as claiming: 'The combination will become the Amstrad magazine market leader. Mike's obviously in dire need of a hype-injection. Wonder what his editorial team think of his little slip (translation: I know, but I was told off the record. Golly, isn't it great being a journo and using phrases like 'off the record' and everything?).

Magazine historians will recall that CPC Computing (recently relaunched as Computing with the Amstrad – fat lot of good that did) itself bought out Amtix!, which also covered the CPC. So now three magazines have been condensed into one, while the independent (Amstrad Action) soldiers on. You could here the laughter from here...

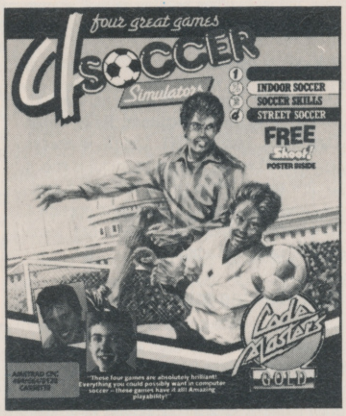
Codemasters go for gold, simulator

Codemasters, the software house owned by the little Darlings, have just launched their first full price game, *4 Soccer Simulators*. It doesn't take an infant prodigy to work out three important facts from that title:

1) There are four games;
2) They're all footie games;
3) Codemasters still like to stick the word simulator in every game title.

This foursome is split into a three and a one, simulator (oops, got me at it now). Soccer skills is the one: it's a *Decathlon*-style waggle game with some shooting and saving sessions thrown in to let you practice those essential ball skills and boost the fitness of your wrist. It's what your right arm's for.

11 a side soccer, indoor soccer and street soccer make up the other three, each basically the same game with minor variations in the rules. 11 a side is the works, with fouls, goalkicks etc.; indoor soccer uses the standard indoor rules; and street soccer hasn't got any rules. You can just foul away to your heart's content. Perhaps they should've got Vinnie Jones to endorse it.


four great games
4 SOCCER
Simulators
1
INDOOR SOCCER
SOCCER SKILLS
STREET SOCCER
4
FREE
Shoot!
POSTER INSIDE
"These four games are absolutely brilliant! Everything you could possibly want in computer soccer – these games have it all! Amazing playability!"
Code Masters
GOLD

• Codemasters' 4 Soccer Simulators

A careful read of the back of the box reminds me of the legendary – nay, mythical – Codemasters' 'Quality Guarantee': 'This game has passed all of our strict playability, graphic, musical and manufacturing tests, and is of the high quality expected of Codemasters'. Two things spring to mind after reading that: *Fruit Machine Simulator*, and the junior Darlings. *Fruit Machine Simulator* is not what I'd call high quality, and four or five year old kids are not, when all is said and done, the ideal people to ask about graphics and music.

Cheats do prosper

I'm often asked (blatant lie) for those nasty cheats that help to make games so much easier. You know the kind of thing: press 17 keys simultaneously in *Wizzywangers* and you get infinite lives and a strained tendon in your wrist. But why are they there? Simple answer: programmers put them there to test out the game, or to give it something a little extra. Here's a few you may not know:

- Hewson's *Cybernoid*. Use the define keys option to use keys Y, X, E and S. Redefine them again and bingo! infinite lives.
- Players' *Reflex*. When you get onto the high score, type CHEAT instead of your name. Next time round you'll begin where you left off.
- Gremlin's *Thing on a Spring*. Press keys THING on the title screen for infinite oil.
- Finally, Mastertronic's *Dr Destructo*. Pause the game, hold down the shift key and type CAVE CANEM (Latin, you know: beware the dog). Now, whenever you pause the game you can press 'z' to go to the next level.

I can understand why the programmers might put these weird things in – after all, they've got to alleviate the boredom somehow – but what I want to know is, how on earth do people find them? There is one answer, of course: they read them in New Computer Express!

Steve Carey

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PCW PATCH

Two steps back

They laughed at Edison when he invented the light bulb; they laughed at Logie Baird when he demonstrated the television; but then they also laughed heartily at Clive Sinclair when he marketed the C5, so they weren't always wrong.

Just occasionally a new product comes out that is so simple, so obvious, so different – so ridiculous, almost – that it's brilliant and devastatingly effective. Just like gravity, you wonder how they got along without it. We've had a sneak preview of Digita's new package for the PCW, a typewriter emulator...

For £29.95, *E-Type* (like the car, geddit?) turns your £500 PCW into a typewriter (obviously best if you have a 9512; 8000 owners can always buy a daisywheel printer for a couple of hundred) saving you all the trouble of pressing 'D' in *LocoScript* for 'direct printing'.

If at first you don't succeed, refuse to comment

The row about Amstrad passing off foreign 8512s as standard machines continues. Remember they shipped a load of German PCWs over to England to cope with 'continued demand' (ie. the fact that they've stopped making 8512s in England)? And how the expansion slot on the back is German standard and won't work with any mice, light pens, or interfaces including Amstrad's own RS232?

Angry owners of these sub-standard PCWs are being told by Amstrad that an adaptor will be available soon but they'll have to pay for it; no prices yet though. Otherwise the boys from Brentwood are steadfastly refusing to comment.

Protection racket

Unprotecting BASIC files has always been easy. Just save a blank listing as "DUMMY.BAS",A (ie. in ASCII) then load your protected listing, MERGE "DUMMY and SAVE the result under the old program name. It can now be listed, edited and have rude messages inserted as you like.

At least, it worked on 8000s. They seem to have fixed the bug on 9512s so if you really want to muck about with a protected program you'll have to get hold of an 8000.

Mate in four

PCW owners are a thoughtful, mature bunch. Rather than play games where you roam in a make-believe world of knights and kings, or go around single-mindedly blasting all your enemy's forces off the face of the earth, they go for pastimes like Chess. You do exactly the same things but it sounds more intellectual.

CP Software are putting together a compilation of games for Christmas. For £19.95 you can play their excellent *Clock Chess 88, Bridge, Backgammon* and *Draughts* games. Details from them on 0993 823463.

Rob Ainsley

QL corner

Designer printing

Sector Software have just released a new printer driver for *Page Designer 2* called *Omnidump*. This allows you to have multi-pass and multi-offset printing as well as grey scale and sideways printing.

ZX Microfair

The next ZX Microfair is to be on the 10th December at the **Horticultural Halls, Great Elverton St, London SW1**. The QL is always represented well at this event, and it is one of the few places left to take a look at the product before you buy. The organisers operate a bring-and-buy stall that usually has some good second hand equipment.

Multi-tasking miracles

It's becoming more common for programmers to consider those who want to use the multi-tasking ability of the QL to its full potential.

So often the purchaser finds his new program requires such a complicated setup routine that nothing else can run before or after it, and the dreaded reset button must be hit yet again.

Customising your boot files has been made considerably easier ty the *Hotkey System 2* utility which is a part of the Qjump *Qram* suite. This utility provides a set of funtions and commands for single-key execution of programs from disk/cartridge or memory-resident. The commands may have added parameters which enable badly-behaved memory-stealing programs like *Quill* to be run in limited memory without having to treat the original programs.

Users who perform many different tasks through a day will certainly find that time they waste resetting and re-booting is greatly reduced. You find with many programs that the only reason you need reset the machine is to load the extensions to the operating system or *Superbasic* that are needed for the program. If you use many packages from the same publisher or created with the same compiler, then most often when you reset you are just removing the extensions, only to re-install them again! Boot files which contain a sequence of commands similar to

"a=RESPR(32768):LBYTESmdvl_fname,a:CALL a"

followed by an EXEC or EXEC_W command are prime candidates to benefit, as is any Runtime module.

About the only software beyond help is that which needs to take total control of the screen – usually games or major graphics applications. Details from Qjump on 0954 50800.

Paul Connell

Bargain Bytes

Miracle Systems is working on a 20 or 30 megabyte hard disk for the QL. The disk will work with their Trump Card expansion interface and plugs into the ROM port on the back of the QL.

Miracle has been a consistent stayer in the market for many years and the appearance of thisl enhancement can only be a matter of time.

Check out the news pages in this issue for the full story.

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All the above QL software is produced by Sector software. Ask for our full guide/pricelist of our QL software.

BULLETIN BOARD

We are now running a Viewdata bulletin board on 0772 454328 *6pm to 9am weekdays and all weekends* which is mainly QL specific but includes a Z88 section and is soon to include an Amiga section.
We are at the moment writing *Amiga to Z88 file transfer software* and *Amiga to QL software*. If you are interested in either of these then please contact us for more details.
We stock too many products to mention in any advert, *(we have a regular four page advert in QL World each month)*, so please send us a SAE or give us a ring for our free product guide and price list.
The next ZX Microfair is to held on December 10th at the usual Hoticultural Halls, London, see us there as usual on stalls 91, 92 and 93.
A goods ordering section is now available on the Bulletin Board, so goods can be ordered by Modem.

NORTHERN SINCLAIR SHOW

Due to a lack of previous shows in the North for Sinclair machines Sector Software are to be organising a Northern Sinclair show around Preston in Lancashire (jnct 28 or 29 M6) in about March, anyone who would like to be mailed with details or any Spectrum, QL, Z88 companies or peripheral suppliers please contact us for details.

We have a range of QL, Spectrum, ZX81, and Amstrad spare parts including service manuals, ring for prices on individual items.

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BEEB BOX

Absent Acorn

Anybody who has ever attended a BBC Micro User Show will be familiar with the unique atmosphere – a kind of cross between a street bazaar and a school PTA meeting. Held in the uninspiring atmosphere of the New Horticultural Halls from November 11th – 13th, the show itself was much the same as normal, with one exception – the absence of Acorn itself.

The reason for this was that Acorn were launching their UNIX box in Cambridge at the time, and obviously couldn't spare any resources for an event like the Micro User Show.

The point is that Acorn need these shows as much as we need Acorn at them. So come on Acorn, let's see you give a little more support to the ordinary computer user – after all, they have given you a lot of support over the years.

BBC DTP

Of the few new products for the BBC B, two of the most interesting were both classed as DTP products, but were in fact light years apart in approach. Watford Electronics' *Wapping Editor* is the classic attempt at the WYSIWYG approach. Using a 64K PALPROM to overcome the limited memory of the BBC, it presents the user with a full WIMP interface, and as such is a delight to use.

It has, however, two drawbacks. Price (it costs £89 plus VAT including mouse) and quality (output is on a standard 9-pin dot matrix printer).

On the other hand, the Mijas software *Laser Typesetting Program* has almost no user interface, but has the ability to utilise all the power of a laser printer.

Written in C using their own compiler, the program is cheap (£20) and full source code is included, so it could be re-compiled to run on the Archimedes. With laser printer prices coming down all the time, it could be just the thing for people who want quality output, quickly.

Alternative awards

The Micro User innovation awards at the show were undecided at the time of writing, so I have decided to give out my own awards.

Most Bizarre Idea Imaginable goes to Jonathan Pickard for his system used to control photocopiers. In my experience you would need at least a Cray 1 to control the average photocopier, as they spend most of their time sulking in corners.

Silliest Name award goes to GRIBLE. No, I can't remember what it stands for, either, but it is in fact a very clever way of analysing industrial processes.

Most Worthwhile Idea goes to Mike Topping for his Robot Feeding Arm. A tool that can help even severely handicapped people, it is all-British, from concept to finance.

Tiny tip

Here's a handy programming tip. Just CALL !-4 in your programs to simulate a BREAK, without touching the keyboard.

Andrew Brown

MSXTRA

MSX show

It's not often the MSX user has the opportunity to try out hardware and software, but now you have the chance.

MSX TECH, a Midlands-based user group, is organising an MSX show. This is to take place on the 4th December and will be held at the Heelands Meeting Place, Heelands, Milton Keynes from 10:30am to 3:30pm. For more information phone 0908 674065.

New Philips MSXs

I have now received details on a range of Philips MSX computers and peripherals that are now available in the UK.

Firstly, we have two MSX 2 computers. The NMS 8220 has 64K user RAM, 128K video RAM, an on-board MSX design program and a full 80-column display. The price is £199.00 inc VAT and delivery.

Next we have the Philips NMS 8245. This has 256K RAM, with 128K video RAM, a 720K (formatted) 3.5" double-sided disk drive, memory mapping and built-in RAM disk function – and, of course, full 80-column display.

Both machines can display 256 colours simultaneously, or can display any 16 colours out of 512. Each machine has a display of 80 x 24 or 40 x 24 (text screen), 512 x 212 or 256 x 212 (graphics screen). The NMS 8245 also has a real-time clock with battery back-up, and this machine is priced at £345.00 inc VAT and delivery.

There are two fully MSX-compatible printers, the NMS 1421/00 – a near-letter-quality machine – and the NMS 1431/00 – a letter-quality machine. Prices have yet to be finalised.

There is a graphics tablet available, the NMS 1150, which has a resolution of 256 x 256 points, and is connected via the 9-pin joystick port. Price is to be announced.

More hard news

It seems the company selling the hard disk drives for the MSX computers is called Sparrow Soft and based in Holland. It is possible that the disk interface may be sold separately, which would mean you could then use any cheap and cheerful drive and save yourself a few bob in the process. More facts when they arrive.

Lastly, we have a plug-in modem package consisting of the NMS 1250 interface-modem cartridge and communications software. This device plugs into the cartridge slot, and supports TTY, VIDITEL/PRESTEL. Features include AUTO DIAL, AUTO ANSWER, ANSWER PICK UP, REDIAL, CALL PROGRESS MONITORING etc. Price is to be announced.

For more information on these items – and also MSX software – write to Nightdare Ltd, 11b Walnut Road, Chelston, Torquay, Devon, or phone 0803 606146.

Software support?

Sadly, Gremlin has confirmed it's no longer producing software for the MSX. But then quite a lot of Japanese software is now available in the UK. I'll pass on suppliers' names and addresses when I've tried some out.

Keith Neal

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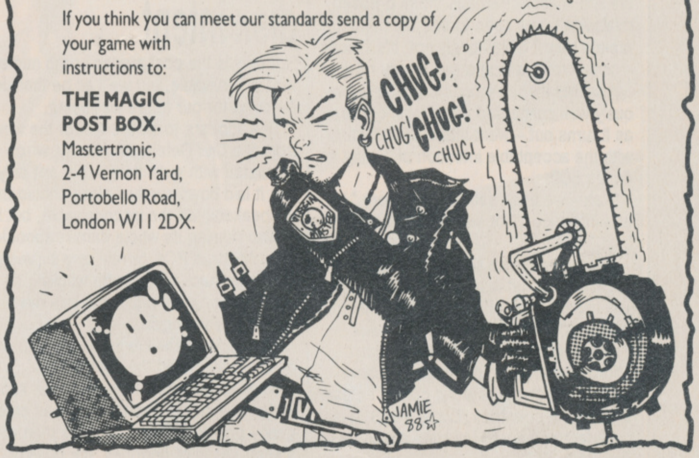
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PSsst!

A last look at the computer scene by cynical old hack, Private I

The death of Commodore!

Commodre has gone bust. No, really. It's snuffed it, exists no more, etc, etc.

And who is the source of this impeccable information? Perhaps those dreaded rivals Atari ever keen to bite the hand that breeds them? Surprisingly not. It's Dixons – or a Dixons' salesperson at any rate.

It seems that an innocent punter – curiously well connected with Commodore, as it turns out – went into a Dixons store with the acceptable intention of buying an Amiga 500.

"Nah – we don't sell 'em any more," he was informed. "Not since they've gone bust."

A couple of years back, Commodore might've reacted in horror at this (and not just because the A500 didn't exist then). In those days, it was running up bank debts so huge that the banks couldn't afford to foreclose, on much the same lines as the financial world couldn't close Third World countries. Come 1988, it is confident enough to tell such anecdotes against itself.

But it all goes to underline what *Express* emphasised last week: that multiple stores such as Dixons really are eminently capable of offering relentless drivel when it comes to computers.

Memo to the multiples: By all means provide bubble-headed kids with vaguely gainful employment. By all means have some sort of collective responsibility to the less advantaged in society. But don't for a nanosecond imagine that they can be sensible aids in the delicate matter of buying a computer. Stick 'em in hi-fi: anything more is simply taking philanthropy too far...

The winter of disk intent

Not only is the post-atomic bomb nuclear winter survivable, but we'll all be thanking Amstrad for our future well-being.

This appears to be the gist of the view from the Civil Defence Authority, which is entrusted with such things. For not only has it laid down survival plans should the unspeakable do the inconceivable, but it is also running its whole damn caboodle from Amstrad PCs. Surely, any surviving computer hack will then be wholly justified in running the old "Amstrads overheat" story yet again.

"The survivors will need all the help we can give them and the control of resources will be all-important. Our subjects will include funerals (!) and an emergency postal service," says the man with a keen sense of priorities, the boss of CDA Brian Hope.

So when you're down in your bunker, having protected to survive, you can thank the Lord God Sugar for having created PCs cheap enough for the CDA to be able to afford. Not-so-cuddly Al may be able to go from 0 to furious at the drop of an aitch, but he does have a certain farsightedness.

There's one porn every minute

Call a game *Sex Vixens From Space*, bang on about the supposed naughty bits, chuck some tame, irrelevant nudity on the cover, and what do you get? Well, initially, you get to witter on about what a terrific scam the whole silly enterprise is (*Express* 1) and gain a pseudo-tabloid headline ("Shock Sex Hype Scam Probe").

So far, so good. But if you're A-Soft, you then get your games impounded by the porn squad at Heathrow airport.

So what do you do then? If you're A-Soft, you backtrack madly. "OK, so the game's been hyped up, but there really isn't that much sexual content. It's a heck of a lot tamer than *Strip Poker*," admitted a chastened boss Tim Harris to trade mag *CTW*.

But if you're an A-Soft distributor like Precision Software, you go beserk. "It's a brutal, fascist regime stopping simple software coming in. The closest you get to seeing anything in the game is in your head," wailed the firm.

Meantime, the rest of the sensible world chortles. "If you will play with fire..."

How to sniff out trendy offices

The pompously-named Mediagenic, which once went by the perfectly serviceable monicker of Activision, has encountered a little local difficulty with its new premises in oh-so-trendy Reading. Staff, it seems, are complaining about the building's proximity to a sewerage works.

Unsubtle pundits are merrily suggesting that such closeness to effluent explains a great deal about its software, its up-coming pile of hits notwithstanding. More sophisticated folk are making analogies with the firm's financial performance, where profits have plummetted to under 15 per cent of what they once were.

Mediagenic may not exactly be in the – er, pits, but then its current position is nothing to write home about. Roll on *Afterburner*. ●

Hype springs eternal 3

Quite possibly for the very last time, here is your unrivalled opportunity to parade your understanding of the real meanings of computer terms. This week: Sales & Marketing blurb. What do the following mean?

1. "...and comes complete with a comprehensive manual"
a) It doesn't b) There's some implausibly thick book which is exasperatingly incomprehensible, has a woefully inadequate index and is backed with illiterate drivel masquerading as writing.

2. "Buy now whilst stocks last"
a) I'm going bust b) I've been shafted by a bunch of crooks who landed me with this load of old toot c) Come back in 6 months and they'll still be here.

3. "Never before have a major software house encountered on such a mission"
a) You're reading an Activision ad penned by the buffoon who popped up in 1. b).

4. "This is gonna be our biggest seller ever"
a) It's demonstrably the weakest of the bunch, so it needs the greatest amount of pumping b) Advance orders stand at 14 c) Well, you should see what the others have sold.

5. "Special Christmas bundle"
a) We couldn't get it together in September b) We did get it together in September, but it didn't sell c) It's the same tosh that didn't work last year.

6. "The biggest and the best"
a) We're irredeemably smug b) We're lying.

7. "And now, specially adapted for the UK audience, comes Europe's top-selling XXXX"
a) European sales were abysmal, but we're relying on the traditional British insularity for you not to know that b) The facility to print pound signs has been removed.

8. "The computer that can do everything"
a) Our ad agency really were desperate b) It's over-priced c) God knows how we're meant to sell this beast, but our techno-boffins have been midnighting away on it for years so we've got to say something.

9. "It's essential"
a) It isn't b)...that we find some way of parting you from your cash.

10. "The most extraordinary tool of its kind"
a)...and I'm the most extraordinary person for saying so.

NEXT WEEK

● Britain's six best-value PCs

We name them and compare them in detail in another unmissable, fact-packed buyer's guide. If you're thinking of buying a computer for serious usage, this feature is an essential read.

● Games which take over your life

Every so often, you discover a computer game which is so totally absorbing, you can do nothing else but play it for months on end. We reveal the programs which have had this effect on us.

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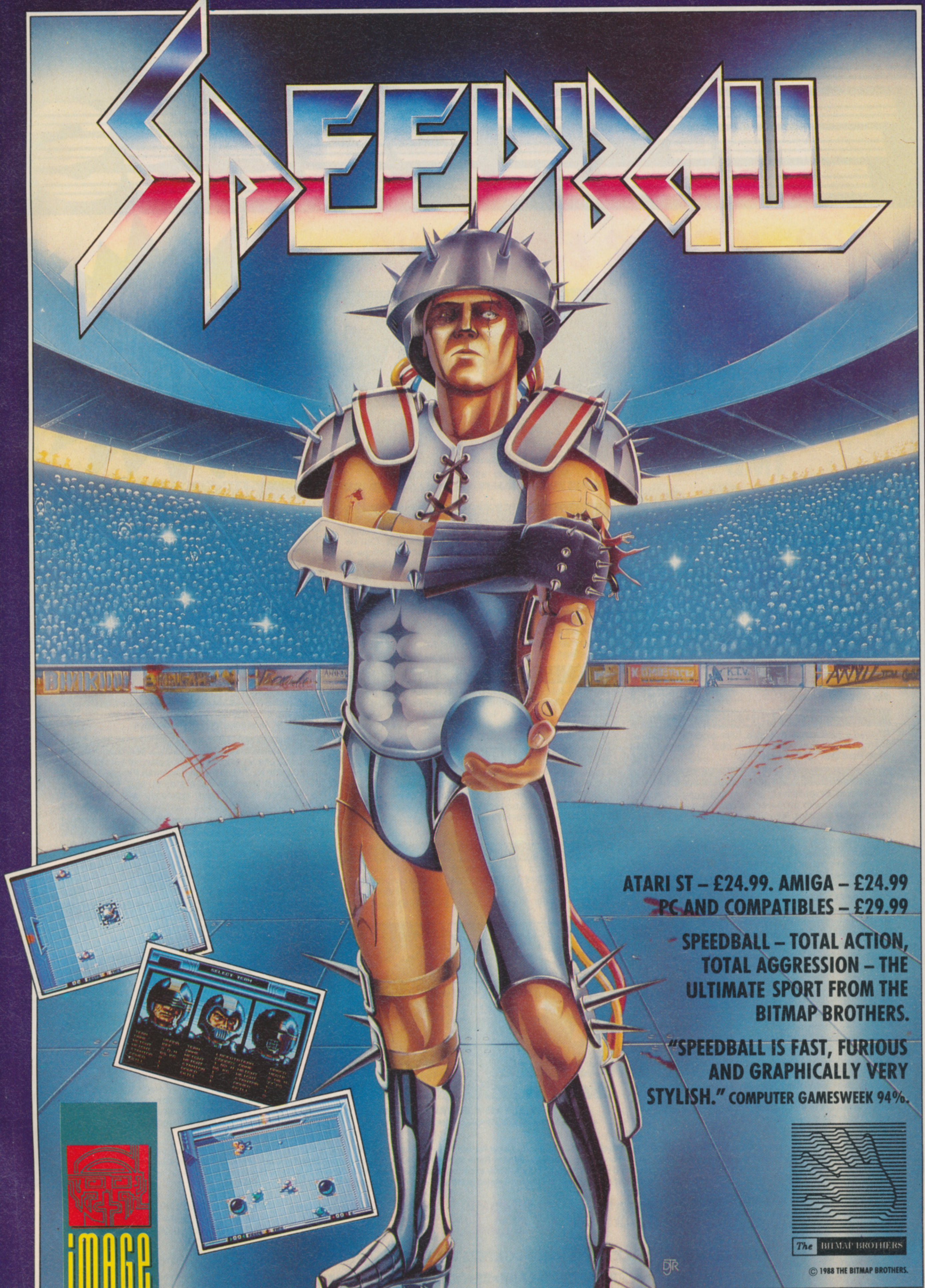

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